ORAL HISTORY INTERVIEWS

DENNIS SCHROEDER

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STATUS OF INTERVIEWS:
OPEN FOR RESEARCH

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Interviews Conducted and Edited by:
Brit Allan Storey
Senior Historian
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STATEMENT OF DONATION
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DENNIS E. SCHROEDER

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INTERVIEWER: Britt Allen Storey

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A note on editorial conventions. In the text of these interviews, information in parentheses, ( ), is actually on the tape. Information in brackets, [ ], has been added to the tape either by the editor to clarify meaning or at the request of the interviewee in order to correct, enlarge, or clarify the interview as it was originally spoken. Words have sometimes been struck out by editor or interviewee in order to clarify meaning or eliminate repetition. In the case of strikeouts, that material has been printed at 50% density to aid in reading the interviews but assuring that the struckout material is readable.

The transcriber and editor also have removed some extraneous words such as false starts and repetitions without indicating their removal. The meaning of the interview has not been changed by this editing.

While we attempt to conform to most standard academic rules of usage (see *The Chicago Manual of Style*), we do not conform to those standards for individual's titles which then would only be capitalized in the text when they are specifically used as a title connected to a name, e.g., "Secretary of the Interior Gale Norton" as opposed to "Gale Norton, the secretary of the interior;" or "Commissioner John Keys" as opposed to "the commissioner, who was John Keys at the time." The convention in the Federal government is to capitalize titles always. Likewise formal titles of acts and offices are capitalized but abbreviated usages are not, e.g., Division of Planning as opposed to "planning;" the Reclamation Projects Authorization and Adjustment Act of 1992, as opposed to "the 1992 act."

The convention with acronyms is that if they are pronounced as a word then they are treated as if they are a word. If they are spelled out by the speaker then they have a hyphen between each letter. An example is the Agency for International Development's acronym: said as a word, it appears as AID but spelled out it appears as A-I-D; another example is the acronym for State Historic Preservation Officer: SHPO when said as a word, but S-H-P-O when spelled out.

Introduction

In 1988, Reclamation began to create a history program. While headquartered in Denver, the history program was developed as a bureau-wide program.

One component of Reclamation's history program is its oral history activity. The primary objectives of Reclamation's oral history activities are: preservation of historical data not normally available through Reclamation records (supplementing already available data on the whole range of Reclamation's history); making the preserved data available to researchers inside and outside Reclamation.

The senior historian of the Bureau of Reclamation developed and directs the oral history program. Questions, comments, and suggestions may be addressed to the senior historian.

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For additional information about Reclamation's history program see:
www.usbr.gov/history

Oral History Interview
Dennis Schroeder

Background

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation, interviewing Dennis E. Schroeder, the area manager of the Phoenix Area Office, in his offices in Phoenix on April the 25th, 1996, at about noon. This is tape one, and the only tape.

I'd like to ask you where you were born and raised and educated and how you ended up at the Bureau of Reclamation.

Schroeder: Well, I was born in Muskatine, Iowa, which is on the Mississippi River, downstream of the Quad City area, which is more familiar to most people. I was born on May 9th, 1942, at Hershey Hospital in Muskatine, and went to the schooling system in Muskatine, through high school, and through junior college. Muskatine High School was the only non-Catholic high school in town at that time. Went to Muskatine Junior College. Coming out of a family of nine, we weren't prepared financially to send nine kids to college, so junior college seemed to be the place to go, and besides that I had an opportunity to play sports and such there, where I wouldn't have had a four-year college, probably.

So after Muskatine Junior College, for two years there, I stayed out of school a year and worked for a silo company. I had worked for them in the summers through my high school days and decided to take a year off to save some money before I went to the University of Iowa, and so from '63, the summer of '63, into '64, I worked for a year, and then I went to the University of Iowa starting in '64, and graduated with a civil engineering degree in 1968–excuse me, February of '67. Then went to graduate school in structural engineering and graduated, finally, in June of 1968 with a master's degree in structural engineering.

During the spring interview period, a guy named Wilson, I forget his first name, but he was there with the Bureau of Reclamation. I had never heard of the Bureau of Reclamation, but I was familiar with the Corps of Engineers. And in reading some of the literature on what they were interested in, I was intrigued with moving West, thought I would enjoy the work, and decided to conduct an interview, and besides that, I'd never seen the mountains. I'd been fairly well isolated in the central United States, Missouri, Illinois, Iowa, Nebraska, but had never traveled West.

So I was interviewed, he offered a job as a GS-9, and my beginning salary was $9,966, I believe, which at that time seemed mighty nice. So I agreed to take the job, and in mid-June, I think June 22nd or so, I headed West. My wife was pregnant and expecting very soon at that time. So I traveled West by myself and started work on June 26th, 1968, in the Concrete Dam Section at the E&R Center. And basically that's how I got there.

Storey: Why were you interested in becoming an engineer?

Interest in Engineering

Schroeder: Well, I was first interested in becoming a game warden. I was an outdoors person. I love to fish. I love to hunt. And every opportunity I had as a child, I spent going to the local park catching bass or going on the Mississippi River and catching striped bass or whatever I could catch. I used to ride my bicycle out and hunt pheasants and cottontail rabbits and squirrels. That always intrigued me. But then I had a brother who went to the University of Iowa, his name was Greg, and in watching him proceed with his career in engineering, I got sidetracked a bit and decided to follow in his footsteps. He became a civil engineer at Iowa.

And the other thing about it was the salaries. As I got through junior college, I got more interested in looking at salaries and where these careers took you. Game wardens don't make a whole lot of money and they got shot at once in a while. (laughter) I was fairly good at math, and so just decided to go into civil engineering and see what I could do there.

Storey: You didn't consider any of the other branches in engineering?

Schroeder: Not really. I worked on a farm as a junior high and through high school, until I started building silos. Civil engineering and the construction site in particular was outdoor work and it just seemed to fit my mold. I never was a person that liked to sit behind a desk for eight hours a day, and obviously building silos and farm work, I was always outside, in the field, doing something. So design engineering, while it didn't get me all excited a whole lot, seemed a better place to go then an electrical engineer, which I presumed was in the office most of the time, if not all the time.

Storey: In your course work, did you bend in any particular direction, in terms of the courses you took?

Schroeder: Yeah, the structural courses interested me the most. It was always challenging to try

and figure out what the problem was really about, and structural analysis and design seemed to be my forte. I got through hydraulics, but it wasn't my strong suit. I got through deferential equations after dropping out one semester, because I flunked the first test. As a matter of fact, I flunked it so bad they had a scale of 97 was the high score, and this was a class of about 100 people, down to zero, and when the instructor passed out the papers, he started with the highest and worked his way to the lowest. This was my first semester. If you can imagine, sitting there watching that stack of paper go down and down and down, and I finally figured out that he was passing from the highest to the lowest, when he came up with the last paper and handed it to me with a zero on it, that's when I decided I'd better get my act together, because this was serious business and wasn't going right.

So I dropped out of that course and reinstated the next semester and wound up with a B in the class. But it was a good lesson to learn, that I needed to apply myself first and then apply myself in a direction that I was more comfortable with. Differential equations and higher level math certainly wasn't my forte.

Storey: Going from a junior college to the University of Iowa to get an engineering degree, did that take you longer than a total of four years?

Schroeder: Yes.

Storey: Four and a half, would you say?

Schroeder: Actually, if you look back, from 19–I guess it was the fall of '63 that I actually got into the university. I think my numbers might have got changed around there a bit. But it took me five years to get my civil engineering degree and then, let me see, '63 to February of '67, and then another year and a half to get the master's degree.

One of the problems I had, I'd maintained a fairly relatively low number of hours, because first I needed an adjustment period, so I carried ten to twelve hours for the first couple of years, then got it up to fifteen hours a semester, I think you needed 145 to get through the system at that time. But the other problem I had, I had two children and I was married. I got married in junior college. So at the university, I would go back to Muskatine and work on weekends. It was just a transition period. It was of a higher powered adjustment to the university for me than possibly for some others. Plus I had a lot of outside things going on at that time. So it took me longer. I never regretted that. I always thought it was much smarter to take fewer hours and get better grades then try to overwhelm yourself and possibly fail on some of them in the process. And again the differential equation

lesson was the one that I just didn't apply myself and didn't have the time to apply myself at that point.

Storey: Why did you decide to take an M.A.?

Schroeder: I had a mentor, of sorts, a gentleman named Sid Smith, had worked with Stanley Engineering and had subsequently gone to work for the university as head of the civil engineering department. He was the neighbor of my wife when she was a young girl growing up, and he knew me. He had lived in Muskatine. Stanley Engineering was in Muskatine, Iowa. So he kind of took me under his arm and advised me along the way and helped me financially by steering me towards scholarship programs and got me scholarships through my college career. But as I ended the career, his message to me was, "Do it now, because if you don't do it now, you probably won't do it," and that was with regard to the graduate degree. His encouragement was to go ahead and get the master's degree.

They offered me an assistantship position at the university so that I could come out financially, and I taught the civil engineering lab class for a year and a half to the undergraduate students, and that helped a lot. But it was mainly Sid's encouragement that took me into graduate school, and I was glad he did because it helped me a lot during my career.

Storey: You don't see very many M.A. engineers, do you?

Schroeder: Well, I'm an M.S.

Storey: An M.S., excuse me.

Schroeder: Yeah, master of science. Possibly not. I'm not sure. Yeah, I think you're probably right. They either go on to get their Ph.D.s or they don't go into it at all. But I certainly didn't have the patience or wherewithal to go for a Ph.D. That was beyond what I considered realistic and beyond what I was interested in. It gets into much higher level of math and much more studious applications. I never fancied myself as an egghead.

Storey: Well, when you went in, tell me about the process when you went in and talked to Mr. Wilson from the Bureau of Reclamation. How did that process work?

Going to Work for Reclamation

Schroeder: Well, the various companies and agencies would come into the university during, I forget what they titled it, but there was a week set aside for them to come in, and the upcoming graduating students would apply for interview periods of an hour and sign up on the sheets, and then they would have their various rooms that you could go in and talk to them, if you were interested in what they had to offer.

I had looked at an engineering firm named Williams & Works in Grand Rapids, Michigan. As a matter of fact, they flew me up there and I talked with them. Then I went back and had an interview with Mr. Wilson. I was just intrigued. He was talking about dams and bridges and roads and canals, a lot of things that were interesting to me from my civil engineering standpoint, and plus I was intrigued with the West. I had been around, again, the Midwest all my life and I was twenty-six, I guess, when I got out, and I just wanted to go West, young man. I do fancy, I guess, that I have a bit of a pioneering spirit, although I'm waning in that regard as I get older. (laughter) But I've always been intrigued with going different places and doing different things.

Storey: Did you just go in and talk to him once?

Schroeder: I just talked to him once.

Storey: About how long?

Schroeder: About an hour. And I think at that time, I had good grades. I had graduated number seven, I think, in the engineering class and two or three in civil engineering, if I remember right. So my credentials were good. We hit it off pretty well during the interview process, and it wasn't long after that, that they sent a letter offering me a position in Denver.

Storey: So he didn't do it at that interview?

Schroeder: I don't think he did. I think he was very optimistic and said they were hiring and needed new engineers and new blood in the organization, but I don't think he was able to lock in and say, "Yeah, I'm going to offer you a job and this is what it'll be." I think I got a letter back from the Bureau.

Storey: And did you fill out an application or anything?

Schroeder: No, not that I recall. I think the interview process was what triggered it. Now, when I got to Denver, of course, and prior to moving to Denver, I had to sign papers

and they moved our furniture, so I had to sign that I would stay with the organization for a period of time and so on. But it was pretty much done on the interview process.

Storey: And then you showed up and were sent to the Concrete Dam Section?

Schroeder: Yes.

Storey: How did that happen? How did they decide where to assign you?

Engineer Rotation Assignments

Schroeder: Well, they had a rotation program, and the first thing they did was get us all together in an auditorium in Denver, and we had to select. You had four rotation assignments, actually. You had to make selections in where you were interested in residing for each three-month increment. I selected concrete dams. It seemed like the place to go at the time. It was the romantic part of the Bureau, and I thought it would be interesting to get in there and see what they did. As it turned out, they had the old Marchant calculators and were using the trial load analysis, which has got equations that is three pages long. I don't know whether you've ever seen it or not.

What they did with a new-coming engineer, they set you down and gave you the trial load analysis book, which scared the hell out of me, because it was pretty much the same thing my differential equations had caught up with me on. So I actually didn't get to do what I thought I would do, and that's work on a dam design, per se. I worked on an analysis of a very large concrete structure. And it wasn't even a real analysis, it was just a practice going through the equation to get familiar with the design method. So for those three months I was not the happiest person around, but made it through that process. As a matter of fact,[I] got to do some drawings of Turk's Head, I think, and Two Forks Dam, which, as you know, the Two Forks came forward here in the late 1980s, proposed for construction. But these were preliminary feasibility designs at that time.

So it got more interesting after the first three or four weeks of pounding on this old calculator. But it was an experience. I went in there with a friend who also in rotation out of Chicago, and we became friends, and he lasted about three weeks at that process and decided that was so dull and boring that he quit and went back to Chicago immediately. He didn't even get through the first month and a half. So it was drudgery.

But then I moved on into the Canals, Bridges, and Pipelines Section and got into some more interesting work there. They went into bridges, and I did a couple timber bridge designs and some other analyses that applied what I had learned in college, rather than starting something new.

I then went into the structural group which was responsible, I think, at that time, for transmission towers and did get into some bridges, also. I got into steel bridge design with that group, and that was interesting and pretty enjoyable work.

Then lastly, I went to Grand Coulee Dam in March of '69, and spent three months at Grand Coulee Third Powerplant, working in the field as a field inspector and learned a lot there and had a very enjoyable experience at Coulee.

Then it was back to Denver in June of '69 for my permanent location within the Denver office. And there were two things; one, I enjoyed the work in the Canals, Bridges and Pipeline Section. I enjoyed the people. The guy that was there, named Clarence Swanson, who was the head of that group at that time, had a little enticement for me, because he said, "If you come to back to our group, I'll give you your GS-11 right away." And that was a jump of a couple thousand dollars after the first year, and that enticed me, too. So I went back to that division.

Storey: Now, you said you were hired as a 9, is that right?

Schroeder: Yes.

Storey: Most people are hired as 7s.

Schroeder: Yes. The master's degree, they counted the master's degree as a year's experience, I guess, was the way it worked out, and were able to make that offer.

Storey: What was it you did specifically at the Canals, Bridges, and Pipeline Section, and why did you enjoy it?

Schroeder: Well, let me see. They were working on the Southern Nevada Water Project at the time. They had a procedure whereby they pretty much gave you a design job and allowed you to function independent, for the most part, although you had a senior engineer always available and working with you. But they turned you loose and gave you the opportunity to not only do the design and work with the challenges of that, but they were into the computer system at that time, the old punch cards, and it was pretty antiquated compared to now. But they just gave you more of a free rein

than what I had found in particular concrete dams. The work they were into, the one I remember working on, was a large water tank, and I had to do all the research and did out of the old books how to design it. Worked with a guy named Walt Long, who was a pretty astute engineer at the time, and he helped me a lot.

Then after that, I got right straight into a pre-stress concrete bridge design for a dam project in Oregon, and that was interesting. Then did some water hammer analyses with a guy named Ray Thibault, who was quite a character and a good engineer, but Ray was not a computer guru. I'd just come out of college and worked with computers quite a bit in college, so Ray used me to do a lot of work that he wanted done on the computer system. So it worked out good. But I think the people that they allowed you to work independently and challenge yourself was a big part of enjoyment I had working with that group.

Storey: What did you do in the structural group?

Schroeder: They were designing a bridge, I think it was for Third [Powerplant] Coulee. It was the walkway bridge leading from either the parking lot over to the main powerplant, but as I remember, it was an orthotopic steel plate girder, which was a fairly new design concept at that time. So what I did in there was worked with a standard design using wide flanged I-beams, girders, to do that structure, and then did an analysis using orthotopic steel girders to cross the span, and it was quite a long span, if I remember right. But that was interesting. You know, I'd just come out of all the textbooks in college of structural steel design, too, so for the three-month period I was in there, I was doing the feasibility studies on that bridge. It was a repetitive cycling of different concepts on those designs, but it was interesting. I almost went back to that section, because I did enjoy the structural steel work. But there was just a little more variety, and plus the offer of my GS-11 right away from Mr. Swanson enticed me.

Storey: Grand Coulee, you said you did an construction inspection.

Construction Inspector At Grand Coulee Dam

Schroeder: Grand Coulee, we were assigned to do construction inspection. They had quite a cadre, four or five of us, rotation engineers went there at the same time. Dave Huss [phonetic] was one of them. A kid named Roy Rush, at the time, now works in the Denver office. And got to work with the old salts that were out there. Roscoe Grange[r] was the construction engineer and Don Duck was there at the time. These were the big names, well, at that time and later, in Reclamation. But it was

enjoyable because it was in the field and a big, big project, and a lot of activity. They were blasting out the forebay at the time I got there. So I was assigned to go down and monitor the loading of the holes and the blasting techniques and blasting proposals.

I worked there for the first five or six weeks, and then to get different experience, moved across to the other side of the river and worked there as an inspector on the administration building that was under construction at the time. So I got both the dam–well, rock excavation experience and some work on the bank stabilization that was going on down on the river and then the work on building construction. So it was really good and enjoyable. It was good fishing, too, at Banks Lake, in the evenings. (laughter)

Storey: The blasting inspection, what were you watching for? What were you looking for? And how did you know what you were looking for?

Schroeder: Well, they would submit a plan, and the plan was approved based on their blasting sequence and the poundage that went into the holes. Once the plan was reviewed, then my job was monitor the powder men, I guess is what they called them. Anyhow, they would put the primacord through the sticks of TNT and load the holes with the proper number of pounds of blasting component, and our job was to observe and make sure they were putting the right number of sticks of dynamite in the holes and the right number of timers. They're not called timers. What are they? Anyhow, they sequence the blast. As the fuse of the primacord is ignited, it delays for split seconds, how the fuse burns or the primacord, so that the blast is well timed, and then it goes off in different places at different times.

My job was also make sure they put the proper timer on the right section of the cord so that the delays occurred as they should and the blast did what it was supposed to do. It was interesting. I was so used to working on the farm and doing work with my hands at that point in time, there was always an urge for me to get in there and help them do their job, but I was told several times that my job was to stand there and look important and do my inspection job and not help those guys load the holes. So it took a while to get adjusted to that. That's what the job was.

Storey: What were you looking for when you were inspecting the construction of the administration building?

Schroeder: The rebar size in the proper locations and the spacing, counting the bars, making sure they had the appropriate number of bars pursuant to the specification drawings

in the right places. Monitoring the concrete placements, making sure they vibrated properly and making sure the forms were in the way they should be. At that stage, the building was pretty much all in the concrete stage of construction. So that was about it, just ensuring that the construction was going the way the design specs called for it to go.

Storey: Did you do anything on the Third Powerhouse?

Schroeder: Not on the Third Powerhouse itself. They were just blasting out the forebay and the powerhouse was not under construction while I was there.

END SIDE 1, TAPE 1. APRIL 25, 1996.
BEGIN SIDE 2, TAPE 1. APRIL 25, 1996.

Storey: You were saying that they were blasting the forebay and had knocked part of the dam down.

Schroeder: Yes. The last two sections. I think it was two or three of the sections on the old Coulee Dam had to come off to create the channel through which the water could flow into the forebay area. So they took, it was two or three, they took those sections off. They had been blasted off, but then they had to go in and do some repairs on the existing concrete on the old dam and construct add-its to lead out toward the new powerplant in a different direction. I did get to do some inspection work on concrete repairs and the epoxy repairs on the work that they were doing in preparation for construction of the new powerplant. But when my three months were up, we headed back for Denver. So during a three-month period on a project that big, you don't get into everything that's going on, and that was fairly short-lived.

Storey: Tell me about Roscoe Granger and Don Duck.

Schroeder: Well, Roscoe made sure that the rotation engineers got over to see him. He was an intriguing guy. I only got to talk to him the one time, but he spent about a half hour, forty-five minutes chatting with me and when I walked in he said, "So you're one of our spinning engineers, eh?" And he caught me off guard for a minute. He started laughing, and I'm standing there, not trembling in my boots, but wondering what the hell he's talking about. Then it dawned on me, rotation, spinning, he's doing a little play on words.

Anyhow, he used to smoke big cigars, huge stogies, about six inches long

and big round ones. He offered me a cigar, and, of course, I was a cigar smoker at that time. He smoked Swisher Sweets, and so I accepted and we sat there and smoked our "ceegar" and chatted. He asked me about my background and was extremely friendly, nice guy. But obviously he just appeared to me to be very nice, but also someone, if he had to attack a problem or deal with a contractor on a serious issue, why, he was every bit prepared to do that, too.

Don Duck I only met a couple of times. Ed Makoff [phonetic] was there, and Ed was in the field doing the assignment of the engineering inspection staff. So I just remember meeting Don one time in the field trailer, and again, he was very congenial, nice guy, and encouraging. They were always glad to see the rotation engineers on the job and always encouraged us with whatever words of wisdom they had. Don's name, I always remember, was kind of intriguing. Someone had told me that Don Duck was the number-two in command, and I said, "What kind of a deal is this? Are they pulling my leg?" (laughter) As the rotation engineer, sometimes they like to pull your leg a bit. But in that case it was serious. Don was well respected among his field staff, too.[1]

Storey: For whom were you working?

Schroeder: Well, Ed Makoff, on the forebay side of the work and the blasting activity, and then when I moved over to the administration building, I worked with Jack Tyler. Jack just retired. Jack was in construction the rest of his career. And I worked for a guy named Jack Garner, who I enjoyed and worked with on the admin building. Jack's advice to me–it wasn't Jack, it was Bob Garner. Bob Garner. I didn't think that sounded right. But Bob taught me building inspection, how to read the specs on the buildings and always assured me that if, in fact, I found a disagreement between what I thought was in the spec and what was going on, he said, "Believe the specifications, because engineers in Denver don't put out bad specifications." He said, "It's in there somewhere." I hadn't see Bob for twenty-some years, until I moved down to this position where I am in Phoenix now, and Bob then was working for me, because he was our resident engineer up at New Waddell Dam. So I got to reacquaint myself with Bob and work in a different capacity with him after all those years.

But excellent field hands. Excellent field hands. I guess that's about it.

1. For more information on Donald J. Duck, see Donald J. Duck, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews, conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, in 1996, in Conifer, Colorado, www.usbr.gov/history/oralhist.html.

I used to work with a guy named Morton Dramer [phonetic], who was the first Crow Indian engineer, out of Montana. He was on the job at the time. Had dealings with Mort. He was a couple years into his work out there, so we were kind of peers at the time.

Storey: Did you take your family to Grand Coulee?

Schroeder: Yes. We lived in the government housing.

Storey: What was that like?

Schroeder: Well, actually it was kind of enjoyable, because we didn't take a television set. The old one we had from college had conked out in the interim, and we took a U-haul trailer and left Denver in March and headed up the highway with me pulling a fourteen-foot U-haul trailer, loaded to the gills, and me in a 1950 Lincoln, V-8, that I'd bought for less than 100 bucks, and my wife following behind pulling–had a 1968 Chevelle SuperSport, 396, nice car, and she was pulling a trailer that I had bought from the same guy I got the Lincoln Continental. The trailer looked like something you see out of the 1930 Dust Bowl days.

We went to Grand Coulee and lived in the housing at Banks Lake, government compound that was set up there. The housing was perfectly adequate. They were double-wide trailers. We didn't have TV for the three months, so we spent our evenings either playing cribbage or playing with the kids or going fishing. The fishing was great. It was very nice to be able to drive a half mile down to the lake and throw in a line.

Storey: How many folks in that government camp? How many trailers, maybe?

Schroeder: Oh, I don't remember the exact size. There were probably 150 to 200 people in the camp, all of them Reclamation employees. There again, you not only worked with the people, but then during the evening hours you got to know them better in terms of the social life and activity, so it was a pretty close-knit group.

Storey: You did a lot of things together?

Schroeder: Yeah. I was a basketball player, so there were a couple of us, Dave Huss, in particular, we'd go down to the local gym and play one-on-one. We also formed a softball team and we traveled around to some of the local communities and would have pickup softball games on evenings or weekends. And they had a bowling

league, and we got into the bowling for a while. So it was a lot of social activities. Some of the people liked to play bridge, and my wife and I were into bridge at the time, so there were several couples that we'd get together with and spend the evening playing bridge and drinking a few beers and talking about whatever. It was enjoyable.

Storey: Who were the people that you were hanging out with then?

Schroeder: Bob Garner was one. Mort Dramer lived right across the road. Our wives got more friendly then Mort and I did. Joe Mitchell and his wife lived there at the time. Coincidentally, Joe worked for me down here on this project and he just retired a couple months ago. Those are the three that I remember the most, because they were right in our proximity. Bob was a sports fan, and the Los Angeles Lakers' Jerry West was my hero, were playing in the playoffs, and we would watch the basketball games and talk about them in the evenings. Again, for the three-month period, it was just a very brief snapshot in things.

Storey: But then you went back to Denver?

Schroeder: Yes.

Storey: To Canals, Bridges, and Pipeline Section. Did your social interaction with other Reclamation folks change?

Back in Denver

Schroeder: No. As a matter of fact, it probably became more concentrated. They had a softball team that I had played on as a rotation engineer, and that included a lot of the engineers between probably twenty-eight and thirty-five, Dan Green, Larry VonThun, Fred Dockhorn, and it got into the technicians. Fred is one of the engineering technicians there. Bob DiManna. All of the people on both softball and then they had a basketball team: Jerry Roth Chevrolet. And, again, I liked–really, basketball was my primary sport. So I got on that team and we won the league championship one or two years of the four that I played on the team.

And there was a bowling league. I got on the bowling league and bowled with most of the same people. So again, similar activities, plus they had a golf league, and I used to go out golfing either during the week or on the weekends, with Max Stodolski and three or four other guys out of our canals/pipelines group, which was all very enjoyable.

Storey: Would there have been activities for the families?

Schroeder: There were some activities for the families. They had the annual picnic out at Lakeside, and we'd take the family and the girls and go out there. I don't remember too much more in terms of family activities other than that annual picnic. So it wasn't that much family oriented, I don't think, in Denver. But we formed a bridge group, too, and again with a lot of the same people I played basketball and softball with. We had eight couples and we'd get together for bridge. Let me see, that's four tables, yeah, sixteen bridge players. That was always fun. We'd play once a month and did that for two or three years.

Storey: Well, I'd like to keep going, but our time is up, I'm afraid. I'd like to ask you whether or not you're willing for the information contained on these tapes and the resulting transcripts to be used by researchers.

Schroeder: Yeah. For what it's worth, they can do what they want with it.

Storey: Okay. Thank you.

END SIDE 2, TAPE 1. APRIL 25, 1996.
BEGIN SIDE 1, TAPE 1. MAY 21, 1996.

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation, interviewing Dennis E. Schroeder, Phoenix Area office manager, in his offices on May the 21st, 1996, at about one o'clock in the afternoon. This is tape one.

Last time we had gotten to your appointment to the Canals, Bridges, and Pipelines Section in Denver, and I think that's where we should pick up, probably. What was going on there? What did they assign you to do?

Canals, Bridges, and Pipeline Section

Schroeder: Yeah, with a bunch of the good old boys at that point in time. I can remember Bill Daley [phonetic] and Ray Thilbault and Clarence Swanson headed up the various groups. Oh, God, there were a couple others at the 13 level that escape me now. But it was a good group to work for, and then they had a bunch of young engineers who have subsequently moved up into higher levels in Reclamation. Walt Long comes to mind. Max Stodolski was in there, and others who have since retired. It doesn't seem that long ago. But, anyhow, it was an enjoyable group to work with.

Some of the things that I worked on were bridge construction or bridge design. Designed a railroad bridge which was a first for me. I'm trying to think of my senior engineer on that, and it doesn't come to mind right now. I know he retired two or three years ago. Anyhow, I designed a railroad bridge. I did a highway bridge for a project up in Oregon with Max Stodolski, and we had some interesting pinnings and things that we thought were pretty innovative at that time.

And worked on the Southern Nevada Water Project, again designing reinforced pre-stressed reinforced concrete storage tanks. That was some fairly heavy parts of the workload. Then they were designing the Auburn/Forest Hills Bridge at that point in time. Let me see. I said Auburn/Forest Hills. Auburn/Forest Hills had been constructed and they were designing a second bridge across the reservoir at Auburn. I did some work on that with another engineer, laying out quantities and doing estimates on the steel and so on in that structure.

Then I was involved in a research project. I don't know how I got into it other than nobody else probably wanted to mess with it. But they had a research vessel out in California, San Diego. San Diego Power and Electric, I guess. Anyhow, the vessel was just an eight-by-twelve vessel with two-foot-thick concrete walls, and they were seeing how the powerplant effluent-heated water affected the tank and how the heat flow would pass through the concrete and the reinforcing steel and so on. Somehow I fell into that and spent a lot of time working out computer programs that would estimate the heat flow through those vessel walls and then determine if the heat on the inside was sufficient, combined with the temperature on the outside to cause cracking of the vessel.

I can remember going back to Washington, D.C., with Jim Graham, who worked over in the lab at that time, and Manny Lopez was the head of the Office of Saline Water, back there. We got into D.C., that was my first trip back, and I can remember Lopez was chuckling about the research effort. Maybe Manny was the sidekick at that point. But anyhow, one of them said, "What the hell, you know it's gonna crack, that's all you need to know." And I said, "Holy mackerel, is this what this research project was all about?" I'm doing all this computer work and theoretical analysis, and these guys are just sitting their chuckling saying, "It's no big deal. It's going to crack."

But anyhow, it was interesting work. I think some of the tedium for me, as an engineer involved in the design group was you had to draft everything that you designed. So I spent an awful lot of time on a drafting board drawing up the bridges and all of the drawings associated with those designs, which wasn't near as much

fun as pecking on the computer and figuring out computer programs to do the calculations and get to the design, the end of the design where you actually then had to sit down and pick out the steel sections and incorporate those in the drawings for the field.

The other frustration, I guess, for me in design, there was a flow of information coming from the field and the drill logs and so on, and sometimes you got faulty data, and then it would come back in corrected on the next cycle, and by that time you had the damn bridge all designed, and with the new information you'd have to essentially recompute everything to make sure you didn't have a major screw-up somewhere.

But I enjoyed design and it was interesting, and a good group to work with. We had a lot of fun. But then there was a job came open in Billings, Montana, and I decided that I would put in for that, and if I got it, it was time to move on.

Storey: Wasn't that sort of heresy to leave the Denver office?

Transferring to Billings

Schroeder: Yeah. If you talk to some of the people there in Denver, it was definitely heresy. As a matter of fact, some of them, what was particularly intriguing about it for me was the job in Billings was an 11/12, and I was an 11 by that time. They thought I was just absolutely stupid for even considering a transfer from a GS-11 to a GS-11. It didn't seem stupid to me, because it, in fact, had a grade attached to it that was higher, and I figured within a year I could move on up to a higher level.

But, yeah, I was informed of how cold it was in Billings, Montana, and that that was the end of the Earth, and that transferring straight across from 11 to 11 was really idiotic. It was kind of interesting.

I guess there was one other thing that intrigued me when I was in Denver. I had come–I don't know if I covered this before or not–but I'd come out of the Corp of Engineers' country, back in Iowa, and I had–I think I did talk about this before–I had called the Corps on a sheet piling problem that I was working on, and one of my supervisors found out that I had called the Corps of Engineers. *That* was heresy. I mean, he informed me we did not speak, at my level, particularly, with the Corps of Engineers on *any* design issue or problem and that henceforth I should ask within the ranks in Reclamation about problems I might encounter and stay away from the Corps of Engineers, which again I took with a grain of salt. That was kind of the

ethic back in those days, that Reclamation was bigger–not bigger, but smarter and better than the Corps, and to ask them questions was verboten. You just didn't do that.

Storey: Let's see. This was '70 or so, '71?

Schroeder: Yeah. By now we're up towards '70, '71. In '72 was when I sought the job in Billings, Montana. I went on an interview trip up there. The supervisor was Jim Rawlings, and we hit it off pretty well and he hired me. Then I moved up there. Then I was a GS-11 in the irrigation operations shop, which took me out of design and then put me in the operation side of Reclamation, which I thought was a good move, because it put me in a whole different arena in terms of background and experience within the Bureau. I did totally different things.

Safety of dams was a major program. I think the Safety of Dams Act at that point in time had been passed in '67, so it was several years old, and as I got up there, there were two old gentlemen, one named Wilson, who used to wear earmuffs in the office and he was kind of eccentric.

Storey: Because he was cold or because there as too much noise or both? (laughter)

Schroeder: I think it was both. (laughter) But I think mostly he just needed to close out all the noise around the office. Anyhow, it was his job that I was essentially moving into, although we overlapped for several months. Then when he left, I took over his function. That was under Jim Rawlings. I got involved with a lot of safety of dams activities.

Paul Bock was in the Denver office, and Paul was quite a guy to work with, and he encouraged me to pick up–Wilson had a penchant for moving things up to a certain point and then they would snag up, and he never could finalize what I was working on, then was standing operating procedures, and they were new in the Bureau at that point in time. They used to have the old designers' operating criteria, and then after the Safety of Dams Act passed, Standard Operating Procedures became a new document that was designed to cover the on-the-ground operations of a project. So I found myself going out to the dams learning how to operate the equipment, taking pictures of the equipment, then putting together a document to describe from stem to stern how all the equipment on the dam operated, and putting in photographs of the equipment and identifying the various parts and pieces. It was interesting, and a bunch of drawings of the dam and the equipment that would come out of the specifications and became a part of the Standard Operating Procedures. I

can remember talking to Paul, and Paul's encouragement was, "Bring 'em to a conclusion. They're not going to be perfect, but get a finished product."

So we did, and we finished operating procedures for, I think, Dickinson Dam and Heart Butte Dam and Fresno Dam, the various dams in the Upper Missouri Region at that time, and they were pretty decent. I mean, they weren't perfect, but at least we got a number of them completed and out to the field and distributed. They were some of the first S-O-Ps that were finalized in Reclamation, I think. That was interesting for a while, but again, that started getting a little old after a while.

But other parts of the Safety of Dams Program, they had five or six dams under study in the E&R Center at that point in time: Dickinson, Gibson, Buffalo Bill, Belle Fourche, Heart Butte, Jamestown, were all under study, and most of them had had an analysis done and most of them were deficient and were being considered for new spillways and other things.

Storey: These were safety of dams studies?

Schroeder: Safety of dams studies, yeah. I think it preceded the SEED, Safety Evaluation of Existing Dams. This was kind of the first go at that process.[2]

Dam Safety Designs

Denver was coming out with some fairly major spillway proposals. I know on Belle Fourche they proposed a glory hole spillway. At Gibson Dam they proposed a fairly major rock excavation and spillway in the right abutment at Gibson. Gibson had overtopped by four feet, eleven inches. I was kind of intrigued. There wasn't a powerplant downstream of Gibson. I simply raised the question, first in the region, "Hell, if it will overtop by four feet, why won't it overtop by eleven feet? Why not let the dam serve as a spillway?" And I think we presented that in writing back to Denver, and lo and behold, that's the fix that finally came about on that dam. It saved a lot of money. The rehab then went to kind of a flip lip over the lower end of the dam and they did away with the excavation on the right side. Did some patch work on the rocks and fixed the dam for a whole lot less money then was initially proposed.

Storey: Is that one, I'm recalling, overtopped in the fifties, maybe?

2. For more information on Reclamation's dam safety program and SEED, see Dave Prosser and Fred Gientke, "Dam Safety Program: A Model for Other Federal Agencies," *Reclamation Era*, Vol. 64: no. 4 (1978): 1-7.

Schroeder: It overtopped in the–I think it was '64, somewhere in that time. I think it was the early sixties.

Storey: When Harold Aldrich was there?

Schroeder: Yeah. Harold was the R-D. There had been a dam failure–well, not at Gibson, no. Gibson was strictly a rainfall in the national forest there. But it overtopped by four feet, eleven inches, if I remember right, and didn't do a whole lot of damage to the structure itself, but it did create some problems because they found out that there was drainage coming off the side downstream of the dam. While it wouldn't have helped a whole lot, the dam tender found out that he couldn't get to the gate stopper at the gates to open the spillway once the storm had started, so the gates were all closed in the spillway. It was a glory hole spillway and would not have contained the flood anyhow.

Anyhow, that concept was developed and used both at Gibson and also at Buffalo Bill. I think Buffalo Bill had major spillway renovations and overhauls associated with its original proposal. Now the design incorporates a bigger spillway, but it also anticipates if the P-M-F ever hits, it would probably overtop Buffalo Bill Dam, too, with no safety problems. It would do some damage downstream, probably, to the structures below the dam, but there aren't that many.

What else? The other thing that was interesting, I worked with an old geologist up there named Red, and I'll be darned if I can conjure up his last name. Red–anyhow, we were commiserating. He was in the geology group, and there again, at Belle Fourche, on the earth-filled dams, obviously you couldn't overtop them, but the glory hole spillways were so expensive and the capacity wasn't that great, so they really didn't help you all that much. You had to not only install the glory hall spillway, but you had to raise the dam a whole bunch to get the storage capacity to deal with the P-M-F.

So I don't know who came up with the idea, but we got to talking about grass-lined spillways and excavating these large spillway areas and then planting them with grass and using those as the emergency spillway. Since then that concept has been used on Belle Fourche. Its been used at Dickinson. Its been used at Heart Butte. That was finally bought off on by the Denver office in combination with our fuse plug concept and became a fairly standard design. And, you know, I think some of that was implemented out of our problems in the Upper Missouri Regional Office in some of the suggestions that came out of there, not necessarily mine and certainly not totally mine. We would just raise questions back to Denver, and lo

and behold, they did respond.

Storey: What's a fuse plug?

Schroeder: A fuse plug is a short, if you want to envision a retaining wall across an emergency spillway, but it's constructed such that if it is overtopped with water, it will fail, but its constructed in such a way that it will fail in succession so that one part will fail in the early stages of the flood, and then if the flood gets worse, the fuse plug continually fails as the water surface comes up. So its designed to fail, but it fails in stages.

Storey: So its designed so it increases the capacity of water that can flow.

Schroeder: Right.

Storey: Okay. That's interesting. I've seen the new spillway at Belle Fourche, but I didn't realize that there was a dike out at the lake end of it.

Schroeder: Belle Fourche may not have a fuse plug associated with it, but I know Heart Butte does. I'm not sure about Dickinson. Its just a combination of whether they needed it or not. The grass-lined spillway concept was one that Denver had to swallow hard to really buy into, because their concern was that you'd get head cutting at the downstream end and the head would cut right back into the reservoir and you'd lose the whole thing. Whether you held the dam or not, you'd still erode a tremendous gouge out of the hillside, and I think they finally were convinced that that really wasn't probably going to happen, and possibly if it did, it'd be so late in the flooding event that it wouldn't make much difference anyhow.

Storey: Were there design–I want to say criteria. Was the spillway designed to avoid that?

Schroeder: Yeah. As far as the grass-lined spillway, yeah. They went out and would take soil samples and determine the erodibility of the soil, and then, as necessary in the excavation and then the preparation for the surfacing and the grass lining, replace it with dirt that would sustain grass growth. It was planted with grasses that would fit the climate and have a good solid root zone.

Storey: So the grass is part of the armoring?

Schroeder: Sure. Yeah, the whole system is designed to hold together. Yeah, if you lose the grass lining, then you're going to erode a lot faster than you would without it. So,

yeah, its all part of it.

Storey: What else were working on out there?

Schroeder: Oh, God, we did a lot of–well, I was involved in the review of maintenance work and going out and inspecting existing facilities and preparing those reports which, again, were then submitted to the Denver office. Involved in the old Soil and Moisture Conservation Program where we would design features to protect federal facilities for the irrigation districts as necessary. It was a nonreimbursable account. It was used to protect federal property. As it turned out, it got to be kind of a slush fund, and it subsequently bit the dust.[3]

I'm trying to think. We did quite a bit of analysis on upstream dams and what their potential impact would be on the downstream Reclamation dams. I found myself getting U-S-G-S quad sheets and counting for days on end the number of upstream dots of water that were stock ponds above Angostura Reservoir and the reservoirs within our system, and also looking at the large reservoirs and obtaining information from the owners to find out what the capacities were in those reservoirs, and then assessing if everything failed upstream what volume of water would be coming down and impacting the downstream Reclamation structure.

Those all fit into the assessment of how safe was our dam and what impact would all those upstream facilities have if they fail. So it wasn't rocket science stuff. I didn't go out and fly over all those things. Counting reservoirs off a quad sheet and then trying to estimate what's a fifty-acre foot and a twenty-acre foot, and counting them all up was okay for a while, but again, I'm not sure how effective that was, but it was part of the job.

I think that was about it. At that point in time, I had about completed, I had a real good start on most of the S-O-Ps, had completed five or six, if I remember right.

Joining the Trans Alaska Pipeline

Several years had passed, and it was now 1974, and the Trans Alaska Pipeline jobs were flowing through the system. I'd seen some advertisements on TV or news broadcast on the Trans Alaska Pipeline, and I decided maybe I ought to go try Alaska and the pipeline work. So that's when I put in, in 1974, early '74, I

3. The Soil and Conservation Program was a cooperative effort between Reclamation and irrigation districts to address erosions problems for the protection of federal property.

think January or February, for one of the field jobs on the pipeline, and they were GS-12 positions. I was a GS-12 by then. But these were GS-12/13–again the slash.

So I got the same kind of treatment there as I got from Denver. Jim Rawlings lectured me at some length on how I was crazy for not insisting that they give me a GS-13 or I wouldn't take the job, and I was so intrigued with the romance of going to Alaska and working on construction of the Trans Alaska Pipeline, I really didn't give a damn. They probably could've given me an 11 and I still would've gone.

But time went by between January or February, and it was May, and I got a phone call. It was from–geez, Jack, I'm trying to think, I'll think of his name in a minute. But anyhow, Jack, who was heading up the oversight team for the Trans Alaska Pipeline Office said he was going to be passing through Billings, Montana, and he'd like to talk to me. So I took my wife and went up to the airport, and we had an interview there at the Billings airport, and then he left, and I didn't hear anything for probably a month, and all of a sudden I got a letter that said, "You've been selected for a position on the Trans Alaska Pipeline, and when can you be here?"

So we set the date in July, and it was the first week of July that we departed Billings, Montana, in 1974, and headed for Anchorage, Alaska, to go to work on the pipeline. That was quite an adventure. We had five daughters at the time, all of them between the ages, I think, about eleven and two, and we loaded up the pickup full of goodies, pulling the trailer which I had purchased, and put a Conestoga-type paraphernalia with a tarp over top. My wife was driving a 1966 Chevrolet which I had purchased for $200 from another guy that worked at the Bureau, and away we went up to the El Can Highway to Alaska. (laughter)

Storey: So this was not a Reclamation job, right?

Schroeder: This was not Reclamation. I had decided to move out of Reclamation. I guess it didn't concern me. I was looking for the experience. Again, I'd been in design, I'd been operation and maintenance, and this was construction, which I felt would give me some additional experience and background, and really I wasn't married to Reclamation in terms of my career. I enjoyed working, for the most part, with Reclamation, but I had not developed such a tight sense of *esprit de corps* that I couldn't envision life without Reclamation at that point.

So we moved, and that was quite a deal. We got into Anchorage–we took, I think, five days on the trip, and had some rainy weather, and the El Can was not paved at that time, it was muddier than hell and these semis would come roaring down the road spraying a solid shot of mud and gravel and garbage, and when it hits your windshield you absolutely couldn't see, and you had to slow down, you couldn't pull over. You just had to hope you could get stopped before you ran off the road, and get out and clean off your windshield and then carry on.

I can remember we tried to stop and camp one night, and I got out the old fishing pole and I had backed down in this weedy ditch area, opened the tailgate and we got the Coleman camp stove out and the kids were out running through the bushes, looking around, and I finally got my fishing pole hooked up, and by this time the mosquitos were hoarding after us with quite a fury, and in about three to four minutes they had eaten us up so badly that I couldn't pack that truck back up quick enough and get the kids loaded fast enough to get the heck out of there. So we didn't try to camp out after that. We stayed in hotels or motels along the road. We stopped at Manchu Lake for a day and I threw the canoe in the water and fished and caught my first lake trout.

Then we got to Anchorage and I checked into work. The second day of work, I immediately got a ticket for turning the wrong direction on an arrow that was restricted during certain hours of the day, so I had my first traffic ticket in Anchorage, Alaska, two days into my trip up there.

But anyhow, we got temporary quarters at the Mush Inn Motel.

Storey: Mush Inn.

Schroeder: Mush Inn. And we were on the second floor. This was a one-room–

END SIDE 1, TAPE 1. MAY 21, 1996.
BEGIN SIDE 2, TAPE 1. MAY 21, 1996.

Storey: So you were in one room with a kitchenette at the Mush Inn Motel with five kids.

Schroeder: Mush Inn, that's right. And we got a sixty-day stay ahead of us if we can't find a house. And my first big surprise was after a week's orientation in the office, they said, "It's time to hit the field." My wife was really impressed with that, because that left her alone at the Mush Inn Motel with the five kids. (laughter)

Building the Pipeline

So I did as every good solider does, I followed orders, and I went to the field and started the–it was a two-week rotation. We were ten days out and then four days off, actually nine days out, one in the office, then four off and then we sequenced like that for the rest of the time on the pipeline work. Diane attended the business back at the motel. That was quite a deal. I can remember still flying into the pipeline camp. I started out down by the Yukon River on Section Four of the pipeline, which encompassed camps–let me see. There was Cold Foot was the main one, and then there was a camp north of that and a camp or two south. That's where I spent the first couple months with a guy named Don Keys, and after working with him a period of time, then I was moved permanently up to Section Five, which covered an area that went over top of the Brooks Mountain range, Atigun Pass, and worked with a guy named Harry Steeves [phonetic]. He was the 13 and I was this one 12. We were called the area officer's field representative, and that was the big cheese and then I was the alternate authorized officer's field representative. And we'd just rotate on two-week cycles. When he was in the field, I was in town, and we'd overlap for a day, and then the other person would leave and go back to Anchorage and the other one would pick up and carry forward.

Our job at that point in time was monitoring the construction of the haul road, which was nothing more than a three- to four-feet sect of gravel fill laid on top of the tundra, for the most part. It was twenty-eight-foot-wide top and then whatever the side slopes went out to, and that was road construction. The insertion of culverts was the big engineering event. But beyond that, it was just dumping gravel and picking the alignment, I guess. The alignment was pretty well set, but once in a while you'd run into things you didn't anticipate, so we'd have to shift.

The other thing that was ongoing at that point in time was identifying the material sites for the gravel used to build the road. And the oil companies, Alyeska, would have to come to the feds to get permission to excavate borrow areas to use for the road fill, and then subsequent to that use the same borrow areas to build the work pad, which was bigger, just like the haul road, only bigger. It was sixty feet wide but essentially the same thing, a three- to four-foot-thick pad laid down so the equipment could work up off the tundra.

Storey: Which agency was this?

Schroeder: This was the Alaska Pipeline Office, and it was set up specifically to oversee construction of the Trans Alaska Pipeline.

Storey: Who supervised you?

Schroeder: A guy named Andy Rollins [phonetic] was the head of it. He was an ex-Corps of Engineers' general. God, I'm trying to think of the second in command. His name is still slipping away from me. But Andy Rollins was a presidential appointee and he worked under an assistant secretary, deputy assistant secretary, I think.

Storey: In Interior?

Schroeder: In Interior, yeah. There was–let me see. Administratively, B-L-M [Bureau of Land Management] handled all our paperwork, but we did not answer through the B-L-M chain of command. So it was kind of a unique organization. But our job was to assure that the stipulations–they had put together a document called "The Grant and Stipulations for Construction of the Trans Alaska Pipeline," and it laid out a bunch of general criteria by which the pipeline would be constructed for environmental protection purposes. Those had been agreed to by the government and by the oil companies, and our job was to enforce those as well as to enforce all of the permits that were issued from–I think it was MESA: Bureau of Mines' Mining Enforcement Safety Administration. We were crossing B-L-M land. We were enforcing B-L-M requirements. We were enforcing Fish and Wildlife Service requirements and others. We were the enforcers on the pipeline and we had a staff working for us, but they didn't have our authority. They had to come through us in order to deal with issues that they might have. We had a–they called it a Joint Fish and Wildlife Service Advisory Team, JFWAT, and it was comprised of Fish and Wildlife Service personnel and Alaska Fish and Game Department personnel, and they would send out a person to the field to stand beside the authorized officer's field representative services advisor on fish and wildlife issues, and then they hired contractors, one, Mechanics Research Institute, M-R-I, was a management contractor that hired then E-E-I, Environment and Ecology Incorporated. They provided the environmental advisor and they also hired an outfit that was pipeline experts, Gulf Interstate Engineering, G-I-E. Each one of those, M-R-I had a person on site, and then a G-I-E person would answer to the M-R-I person, and the E-E-I would answer to M-R-I and they all answered to the O-F-R. (laughter)

They were our eyes and ears for 150 miles of pipeline construction. Certainly one person couldn't cover it all. So it comprised a five-person team. You had the O-F-R and then Gulf Interstate watched the pipeline welding and other aspects of that, and they would answer back. If something was going haywire, they would issue reports back to me or my alternate. E-E-I would watch the environmental issues, facilitation and how they were tearing the up the land or the

terrain or whether they were getting off the work paths and shouldn't be and the oil spills and such, and then the Fish and Wildlife person would deal with the instream issues, for the most part, and drainage issues. Then the Mechanics Research person was kind of a supervisor of that group. They didn't want the O-F-R messing with supervision, although it didn't work out that way. They all pretty much, in the end, answered straight to the authorized officer's field rep.

Storey: How long were you there before pipeline construction started?

Schroeder: Let me see. I got there in July, and in September I think we had the completion of the road. So the road construction took the first three, three and a half months. Then the proverbial shit hit the fan, because then the pipeline. What the road did was open up access all the way from Fairbanks to the North, and they had completed the bridge across the Yukon River. Initially they were barging trucks and stuff across the Yukon River. They had a couple of barges there, that everything had to come across by barge, and once the bridge was completed and the road was connected up, then you had a link for transportation, and the semis started rolling in and they brought with them the bulldozers and the side booms and all the equipment to really dig in and get the pipeline construction going.

A major portion of the pipeline was elevated through our area, sitting on vertical support members, and those essentially are piling, specialized piling, and they run in some big drills and they drill a twenty-four-inch-diameter hole–a twenty-one-inch-diameter hole, I guess. The piling V-S-Ms were eighteen inches in diameter, then they'd put a three-inch annulus of sand, a special sand slurry around those piles. All of this was to prevent thawing of the ground and sinking of the pipeline. These things had to freeze in place, and they had a special refrigeration system attached to them. I guess you could call it a perpetual refrigeration cycling. There was a gas and tubing, and they would operate based on the temperature, outside air temperature. Some of this really technical stuff is going to escape me, but that was the general operation. Those things would preserve the frozen ground that that piling was sunk into or drilled into.

Storey: They didn't want the permafrost to thaw out at all.

Schroeder: That's right. That's right. That was the major activity in the winter of 1975, '74, '74, '75, yeah. I got there in July of '74. We're into the fall of '74 and spring of '75, and that was the main time that we built the work pad and drilled the V-S-Ms in preparation for laying the pipeline.

Then a major activity was hauling the pipeline in. We had to haul eighty-foot lengths of this pipeline and it was barged over from Japan in forty-foot lengths. I don't think it was Anchorage, somewhere down in the Anchorage area, the pipe was welded into double units and then hauled up in eighty-foot lengths to the North End, where it was then welded into a unitized pipeline and placed in the ground.

Major pipe-laying started in the spring of '75 and continued through the winter of–let me see. I'm getting my years–I was out of there in the fall. Yeah, okay. Spring of '76.

Major pipe laying started fall of '75, summer of '75, and then took place the year from '75 summer to the summer of '76. So preliminaries took about a year and then the actual pipe laying and construction took about a year. Quite a program. It was really interesting.

The second year they decided, based on the history of the first year, that it was too damn cold to work both the people and the machines through periods starting in late November through the middle of February. So the second year, they tried to work all year-round the first year, and it was expensive and hard on equipment. Most of the people wanted to get out of there at Christmastime anyhow. So the second year–this is the fall of '75–they shut down about the first week of December and the whole thing was closed down for a month and a half. About the second week of February, then they started back up again. Let me see–

Storey: That would be about two and a half months, I think.

Schroeder: Oh, yeah. December, January, right, two and a half months.

I can remember that first year, you know, we were laying pipe in the Atigun River and it was just colder than the holy hubs of whatever and they were trying to lay the final segment of pipe, which was a couple of miles long, and it was probably 60 below zero. You had an open trench full of water, and the water was freezing as fast as you could slop around in it. The pipe would become icy, and to coat the pipe you had to heat the pipe up to somewhere around 210 or so degrees so that the coating would stick to the pipe, the tape coating. They were having a hell of a time with that.

So they had a big torpedo heater on the front end of the pipe and a big fan on the back end trying to suck hot air through the pipe to get the temperature up so they could roll the tape on. It was just one hell of a mess. And after the 20,000-pound

weights that they would sit on top the pipe to hold it down in the water, a few of them would rotate and fall off the pipe, because it was getting wet, would freeze as fast as the water would get on it. Those weights were falling down, going down fifteen, twenty feet down into the trench, and they'd have to fish those out. It was pretty obvious that was an awful expensive operation. So that was the last operation in '75 and they shut down shortly after. They figured out that wasn't working very well.

I don't know. Beyond that, a lot of interesting things went on in the pipeline, you know. We were there to enforce, but we were there also to understand that that was a high-priority project and our ultimate mission was to get oil from Prudhoe Bay down to the Port of Valdez, so they could start shipping it to the United States. So we had to make some calls, basically every day, on what was acceptable and what was not and what they could do and what they couldn't. And for sure you had to have some pretty serious issues to shut them down, because it was not only costly, but it was impeding the progress in getting that thing constructed. Now, that doesn't mean that we put up with a lot of spec violation or anything else, but you had to make decisions promptly and you had to direct them. If you didn't like what they were doing, you'd better have a better alternative to tell them about and move them in your direction or get out of the way. That was the general attitude. Either lead, follow, or get the hell out of the way, because the pipeline's a-comin'. Anyhow, there were some interesting things there.

I got a fishing hole–not a fishing hole, they've got overwintering areas up there. Everything freezes up solid, except there are certain warm springs where water pools and flows year-round. If the fish don't find those places by the time it gets cold, they don't survive. So if you go to an overwintering area, you will find it absolutely loaded with fish, and they have to have a water situation where there's enough oxygen coming into the water and enough warm water to keep them unfrozen throughout the year. This was pretty much unexplored territory.

One fine winter day I was driving along the road and I saw this water, so I got out of the vehicle and strolled down to the ditch and started looking, and there were fish in there. So I wrote a report on this, because I knew nothing had been identified in this section of the river as an overwintering area. After the pipeline was finished, a bunch of the biologists had to go back through all the system and start naming things, and they named this one Schroeder's Springs. So somewhere up there on the upper Dishna River, there's Schroeder's Springs. I'm sure there's a big sign there that says "Schroeder's Springs, this way." (laughter)

Storey: When the bridge was opened and the road had been completed, did you get a lot of civilian traffic up there?

Schroeder: No. Civilians couldn't travel on the road that was designated a pipeline road. I forget the name of the place, but somewhere fifty or sixty miles north of Fairbanks, if I remember right, was where the new haul road construction had taken off. So beyond that, it was restricted to pipeline-only traffic. So there were no civilians, no booze allowed on the pipeline, the first year there were no females allowed on the pipeline. Most of that fell by the wayside. The first year, the women–I don't know whether the women protested or what happened, but they decided that that wasn't a smart move, so they removed that restriction. They never did remove the booze restriction, though. You couldn't have alcoholic beverages on the pipeline. Now, that's not to say they weren't there, that's just to say they weren't authorized. So anybody that had alcohol up there, and most of them did one way or another. It was either smuggled in by the truckers who would receive an inordinate amount for a bottle of booze, or it was brought in the baggage on flights, or they made it on site. There were some guys who had their own little distilleries set up in their rooms. (laughter) They would make their own wine by stealing the grape juice from the mess hall and converted it to wine in their rooms.

Storey: What were the winters like?

Life on the Alaska Pipeline

Schroeder: The winters were extremely cold, but usually not a lot of wind, unless there was a major storm moving through. Temperatures at D2 camp, I think the lowest we ever got was down to minus, I want to say 86, I'm not sure that's accurate, it might've been 76, but it was cold. And anybody that tells you once you get past 20 below you don't notice how much colder it gets is full of hooey, because you know when it gets past 40 below or 60 below. You can feel it. I mean, I ran outside, I had to go to a different trailer one day and it was about 65 below zero, so I zipped across in just my short-sleeve short, and by the time I got back, man, I could feel a tingling in my arm, it was that quick to set in, giving you notice that you're going to start freezing here pretty quick. We had heavy duty–what are they, Henry Bauer suits.

Storey: Eddie Bauer, maybe?

Schroeder: Eddie Bauer. Eddie Bauer, yeah. Eddie Bauer suits. And bunny boots issued during the Korean War. I mean, we were issued some really cold-weather gear to take care of it.

The other problem was the equipment and they had to maintain the electric plug-in starter units for the vehicles. Some people left the vehicles running twenty-four hours a day, which was pretty stupid, because it only took the electrical oil heater about a half hour, forty-five minutes to get it where it would start in the morning. But that was just the attitude of some of them up there, that, by God, if they had to work up there, they were going to be comfortable, so they left their pickups running all the time.

Storey: What were the accommodations like in the camps where you had to stay?

Schroeder: The accommodations weren't bad. Each room had two bunks in it, two bunk beds. Let me see. There were units laid out in an L-shape with a central hall, and then all of the rooms going side by side off of the central hall. Each one had a central shower and toilet facility and washers and dryers in an area. They were all interconnected. There were several different arms with those units to the side end of the central hallway, and then those things would be laid out in whatever direction the camp geography dictated.

But the mess halls and the sewage treatment facilities and everything were all separate buildings, and then you had all the office buildings were separate units. But they were tolerable. They weren't fancy. I think they tried to make up for some of the rudimentary facilities by feeding you food that was really fine food. They'd feed you steak, good steak, one night a week. They'd feed lobster tail. Usually the steak and lobster tail were offered on the same night and then steak on another night. And they had different menu items, but for sure you had steak and lobster at least once a week, and as many as you wanted. You ate as much as you want of anything you wanted. No restrictions. That was the first year, it was under a cost-plus contract. Then they tried to economize a bit the second year and brought in a low-bid catered operation, and that went to hell in a handbasket in a hurry.

They had some strikes, limited strikes, by the pipeliners. The way the pipeline welders strike is they simply do a lousy job of welding so you spend one day doing a lousy job of welding, and then the next day you've got to go back, after they X-ray all the welds, and spend the next day going over the same welds doing all the repair work. So progress could vary as much or as low as ten or fifteen welds in a day when you knew full well that a crew during an eight- or ten-hour shift could weld as many as 130 to 150 joints of pipe if they wanted to. It was interesting, watching that operation. When they were moving, they really moved. If they didn't want to move, if there was something that irritated them associated with the pipeline camp or supervision or whatever, then they didn't move.

Storey: So the pipeline camp was supported by the consortium building the pipeline?

Schroeder: Yes, Aleyeska.

Storey: And the food?

Schroeder: And the food. They were the financiers. They had Bechtel in there as a construction management firm for the first year, and that layer did not work. They had oil company executives over top of the whole thing and each was a representative in each camp, and then Bechtel had a camp manager that supposedly had certain authorities, and then you had the engineering firm, Michael Baker, Jr., was in there for the haul road and they had then the pipeline construction contractor who did the actual construction. It was quite a mix. They had drilling crews, drilling the V-S-Ms. They had the pipeline welders and they had engineers, soil engineers, pipeline engineers, and then the contractors' superintendents. God, it was quite a mixture of people.

Storey: Then the federal representatives, also?

Schroeder: Then the federal oversight.

Storey: Were fed by them?

Schroeder: Oh, yea. Now, the way that worked, yeah, we were allowed a per diem out in the camps. Each meal was allocated a certain dollar amount, I think three bucks for breakfast, three bucks for lunch and six bucks for dinner. If you choose not to eat, you could get a three-dollar credit on your per diem. If you ate the meal, you had to take credit for eating a meal and then it took three bucks off your per diem allotment. So that got to be a bit of a point of controversy, because the oil company, the second year, when their auditors found out how we were doing that, they said, "Wait just a minute. We have the food there. The food is available. If you choose not to eat it, that's fine, but don't be charging us three bucks for the fact that you didn't eat a meal." I don't know how they ever worked that out. It was a minor issue. But, yeah, we received a per diem allowance and generally worked twelve- to fourteen-hour days, so there was overtime.

Then there was hazardous duty pay for certain periods when you flew in the helicopters and did certain things that were generally considered to be hazardous. We were probably the lowest paid people on the job, the feds. The state, I think the state at that time paid better. We received a GS salary rating commensurate with

the Lower 48, plus just as the pipeline construction started, they dropped from 25 percent deferential to 22 percent. So we had a 22 percent wage deferential for the Alaska cost of living. And then for whatever reason, the government, after two years of discussion and figuring out that they had dropped at the wrong point of time, because during the pipeline construction, prices went way up, they decided to jack it back up to 25 percent. So I was at 22 percent for the whole period of time I was up there, and just before I got there it was 25 percent, it dropped. Just after I left, they raised it back up to 25 percent.

Storey: That sounds more like Storey luck. (laughter)

Controversy on the Pipeline

Schroeder: Yeah, it was one of those bureaucratic deals. Anyhow, I don't know where else to go on the pipeline. There were a lot of things that occurred. We had the pipeline welding fiasco, where an investigation team came out of Congress in their role of oversight. Who was the guy from Michigan? Called us a bunch of one-eyed, toothless watchdogs. And the fact was they had falsified some x-rays. In order to catch up with x-raying, they took a single x-ray and packaged it in a bunch of weld canisters. They could duplicate an x-ray faster than they could create a new one, so they could jump some segments of the pipe, and you had the same x-ray for many different welds. That was the general nature of what they had done. When they discovered that, then they had to go back through and review all of the weld x-rays, determine where there was duplicated weld x-rays, dig the pipe up, re-x-ray the weld that had not received an x-ray initially, and confirm that it was, in fact, safe. And that's what that whole thing was about.

Storey: I remember hearing something about it.

Schroeder: It was intentional. It was flagrantly done. It didn't involve that many. I think we had 500. I'm trying to think, I think 500 on the entire pipeline, and some of which were in my area, but when, in fact, they went back and reviewed–

END SIDE 2, TAPE 1. MAY 21, 1996.
BEGIN SIDE 1, TAPE 2. MAY 21, 1996.

Storey: This is tape two of an interview by Brit Storey with Dennis Schroeder on May the 21st, 1996.

Some of those duplicate x-rays were in your area.

Schroeder: Yeah. And in the process of reviewing the welds with new readers of the welds, they discovered things that were then called flaws that hadn't been picked up on before, so, in fact, you compounded your problem by having to go back in and do repairs on some wells that weren't a part of this duplicative process, but they picked up some flaws that they felt needed to be repaired. So we wound up digging up in a couple river areas some significant work to get down and get the welds excavated and the holes pumped out and re-welding. It was a costly effort, and I think everybody learned a lesson. It wasn't because we were one-eyed, toothless watchdogs, but, in fact, it should've never happen, but it did. But it got corrected, and the pipeline's been operating without a blowout for the past twenty years now.

Storey: How'd you make out with housing up there for your family?

Housing in Alaska

Schroeder: Housing wasn't that bad. We had left Billings. We had purchased a house in Billings in 1972 at $33,000, and sold it for $42,000. Moved to Anchorage and had to buy a house at $61,500, and over the two years we were there, it escalated about $10,000, and we sold it at $73,000, I think. So it wasn't bad. The main thing, I guess, the costs had not risen at that point in time. We got in it early enough that they were still halfway reasonable.

There was sufficient housing, because most of the pipeline crew and the workers on the pipeline lived in the Lower 48 and did not take up permanent residence in Alaska, but simply flew into the pipeline camps and then back out. But we lived out in the Turnagain Arm area, our biggest concern was having another earthquake like they did in '64. Just across the road, about a mile and a half away from where we purchased the house, was the Ocean side, I think, area where a bunch of houses had crumpled into the ocean during the '64 earthquake. It was subsidence area.

That was a concern, particularly on New Year's Eve in '75 when we were all sitting around having a drink, I guess it was either '75 or '76, but anyhow, a 5.4 earthquake hit. That was a my first experience with it and it got my attention. Every time I would feel a vibration in a building, whether it's caused by a semi passing outside or in an airport where they're rolling some heavy thing around, I would tense up, thinking another earthquake might be coming. It really is a mental thing that gets hold of you after you've been through one. I've been through several since in California, and I guess you get used to them. But that was an experience.

We enjoyed Anchorage. I guess if I had a problem with Anchorage, it probably wasn't my issue, it was Diane's, because I left her alone most of the time with five kids, and it wasn't the best place to raise a family. There were drugs and drug problems, even down into the grade schools, which in '75-'76 time frame was really strange for us. It hadn't reached the point that now everybody is accustomed to. But they had what they called "darkies" who roamed the halls in the junior high schools in Anchorage, Alaska, in 1975. Part of the problem was the winters were long, essentially covered from October through May. It was fairly cold and always had an opportunity of snow and nasty weather and wind, so you spent a lot of time inside watching TV and playing games or whatever.

Anchorage wasn't nearly as flushed then as it is now. With all the oil money, they've built an awful lot of civic facilities. They've got a lot of gymnasiums, and I think they open all the schools up for activities in the evenings. There's a lot more things to do now than there were then.

That's about it. We only took one vacation when I was up there. The pipeline work never stopped. But I did take two weeks off, took the family up to Lake Louise, which is northeast of Fairbanks about 150 miles, and spent time fishing and catching three- to five-pound lake trout and floating around in a canoe and just enjoying ourselves for about a week-and-a-half period. But that was the only time, really, we had off, while we were up there.

Storey: What caused you to move then?

Schroeder: What caused me to move? The pipeline construction was coming to a close. Actually, Diane gave me an ultimatum: either move or she was moving without me. (laughter) But I was ready to leave. I anticipated that when the pipeline was done, the oversight wasn't going to be that great. I really didn't like raising the five girls up there.

Returns to Reclamation

So in '74 I got a call from Jim Rawlings, who was my old supervisor in Billings, and he said, "I'm going to open up a job as an assistant down here. Would you be interested in applying?"

I said, "Sure."

Prior to that, I'd called a guy named Jim Vars [phonetic] who had a GS-12

engineering job. And when Diane indicated she wanted to get out of there, I had essentially applied for that job, which would've been a downgrade from what I was then, a 13. But I decided I'd better pay attention. Subsequently, Jim hired somebody else–Jim Vars, that is–but Jim Rawlings hired me, and so in September of '76, August of '76, I moved the kids and Diane down and then I finished up the next three or four weeks in Anchorage and wound up moving back to Billings, Montana, in late September in 1976, and became the assistant supervisor of water and land at the Upper Missouri Regional Office.

Storey: This is working for Jim?

Schroeder: This is working for–

Storey: And he was the division chief, I believe.

Schroeder: He was the division chief. He was the 400 Chief. He had replaced Bud Alvin [phonetic]. I think Bud had retired or moved to Denver, one of the two at that point in time. But at any rate, things had shifted and Jim hired me as an assistant. So now I was back involved in not only the old safety of dams stuff and the irrigation operation stuff, but the other activities associated with the 400 Group. So now I'm into the recreation and I'm into the land management and all the other things that 400 did.

Storey: Before we go on and talk about that, you arrived back in Billings one or two months after the failure of Teton [Dam].

Schroeder: Ah, yes.

Storey: What was going on among people over that in Billings? How were people reacting and what was happening?

Schroeder: Really, I didn't notice a major affect in Billings. I can tell you, I think it was June 6th of '76, or close to that, and I was in the office in Anchorage. Andy Rollins, who was an ex-Corps general, come down to the bullpen, which is where the field people came, we set a desk in there, and he says, "Dennis, my God, did you see the paper?"

I told him, "Yeah, I did."

We got to talking about it, and I can remember old Andy saying, "Thank God it wasn't a Corps of Engineers' dam." (laughter) That was the reaction up

there.

Then I can remember later on sending one of the guys in Denver into a panic because I made the stupid mistake of thinking that I would call one of the guys I knew who was not heavily involved in the design, but involved in the design. So I called him and said, "This is such and such reporter out of the *San Francisco Examiner*, and I understand you were involved in the design of Teton Dam. I want to talk to you." And there was absolute panic on the other end of the line. The line went blank, and I knew he had laid the phone down and was going around somewhere to get help from somebody. I said, "Oh, my God, now I've screwed up. I need to head this off." So when he got back on the line, I said, "Hey, wait a minute. I'm sorry. Dumb joke, I apologize. I didn't realize it was that sensitive down there." (laughter) I said, "This is Dennis, your old buddy." But he didn't think that was very funny. As it turned out, it probably was a stupid trick to pull.

In Billings, I guess, aside from the additional emphasis then on moving the MOD reports through and getting on with construction and so on, it was fairly much removed from the real substance of the Teton issue. We were all interested in the reports as they were generated and came out, but I don't recollect it having a major impact on the morale of the office, if that's what the question is.

Storey: So what were you doing as Jim's assistant?

New Responsibilities in Billings

Schroeder: Well, as Jim's assistant, this was a four-year stint. As Jim's assistant, let me see. Bill Lloyd was there as the regional director at that point in time. I was more or less involved in moving the paper through. I served as the guard for Jim to deal with those things that he didn't have to see and didn't have to sign.

I got heavily involved in our budgeting process, and I got fairly heavily involved in some of the money management issues. One of them, I mentioned earlier, was our activities associated with the Soil and Moisture Conservation Program. We had in the Billings office fully half of the budget for Soil and Moisture Conservation. I think it was a $4 or $5 million program. A couple of regions only had a couple hundred thousand dollars in their entire program, and we were going through 2 to 3 million dollars every year. I more or less injected myself into the process and started asking questions. Why in the hell are we building irrigation systems in campgrounds and calling it protection of federal property? I didn't read the law to be quite that loose-goosey.

The other thing that had gone on, they had built major structures on several, or at least one facility, I think it's Muddy Creek in Wyoming. Anyhow, fairly major structures at the tail end of an irrigation project where they dumped off all the water that was left over after they passed it through their system, and they were eroding the hell out of the landscape and dumping it all into the Parks Fork of the Yellowstone and creating major problems there. To stop that erosion, using Soil and Moisture Conservation funds, they had built big drop structures along the creek. They still didn't stop the erosion, but they did stop the head cutting.

For whatever reason, that became extremely controversial, our use of the Soil and Moisture Conservation money, and we were using it for things such as protecting a small canal down on the Lower Yellowstone Project. I can remember going down and looking at this field, and there's a little canal that maybe runs one C-F-S [cubic feet per second] of water, it's a foot wide and a foot deep, and yet we're giving the irrigation district $2 to $300,000 year to build these steel jacks to throw in the river to halt the erosion and cause the river to drop sediment, slow the current and drop sediment and build up weed patches along the edges of the river so they didn't get at this government facility, which was this little canal, ostensibly. What it appeared to me was that we had a "make work" program for the district to help them get through the winter and pay their work force with Soil and Moisture Conservation funds and use this as an excuse to keep them busy. That didn't go over very big, because they had been doing this for several years.

The guy in charge of it was Leland Tegess [phonetic], and Tegess jealously guarded his programs and his funding, and if anybody got in the way, Leland took great issue with that. But, in fact, it was being questioned in Washington by Cliff Barrett, who was, I think, the assistant commissioner at that point in time, and others. So that became a major issue.

I got involved in other activities, mostly in land management issues associated with recreation. It seemed like wherever Leland had his fingers in the pot, we had controversy. It wasn't just Leland. Jim's philosophy, and I'd always liked Jim, but I didn't like his philosophy, because his philosophy that he told me one time was, "If we're not getting letters from the congressmen, we're not doing our job." Well, hell, the only reason you get letters from congressmen is because somebody's pissed off at what you're doing out in the field, and sometimes rightfully so, and sometimes not rightfully so. You can't do much about it.

But there were a lot of antagonized people. We were at odds with the Wyoming Recreation Commission. We were at odds with the Montana Recreation

Department, mostly over the way they were managing the recreation facilities, and Leland's view of them was that they were incompetent and he wanted to take over all of the recreation management under his jurisdiction. In their view, Leland was imposing federal requirements, regulations which were too stringent, which were too costly, and were driving them and their concessionaires out of business by his tight-fisted and heavy-handed methods.

We were also at odds with ranchers around Tiber Reservoir[4] associated with grazing and their right to access the lake for water for the cattle. Leland's approach to that was fence the bastardy out and fence every reservoir and lock the gates. In fact, the purchase agreements with the cattle ranchers had given them the right to have access to the lake for water. So I got involved in, as Bill Lloyd called it, being an ombudsman and went up to several public meetings with the ranchers at Tiber. We were still acquiring land at Tiber Reservoir and we were locked into acquiring the land to the full extent of the 300 foot outside of the high flood water mark. In my view, we didn't need the land, it was silly to buy land beyond the P-M-F range.

So we went up and talked with the ranchers and came to a compromise that gave them cattle lanes to the lake we fenced, but we provided access and we kept back our purchasing requirements. In some areas where we needed nothing more than maybe an easement, we purchased some easements instead of purchasing land, and pretty much got that situation resolved. I guess as I evolved in the job I became more of a troubleshooter for the R-D to try to deal with some of the issues that were being created within our division.

I can remember at one point it came to a head. Bill Lloyd had left by then and Joe Marcow [phonetic] was then the R-D, and Jim Rawlings was acting assistant R-D. I was acting supervisor of water and land, and Bill Lloyd moved to Boise.

Storey: And became regional director there.

Schroeder: Then he became R-D down there. Joe Marcow was acting R-D in the region, Joe Marcow called me on the phone one day and says, "We're going to have a meeting."

I said, "What about?"

"Well," he said, "We've got some people that are making some accusations

4. Tiber Dam is on the Mares River in north central Montana, and is part of the Lower Mares Unit of the Pick-Sloan Missouri Basin Program.

about you and we need to have a discussion."

So I went to a meeting and there was a contingent of five people who were in the recreation area and the land resource management area and the Soil and Moisture Conservation, Leland Tegess and his staff. They went to the R-D. In my acting capacity, I had vetoed some of the things that they wanted to do. I just told them, "We're not going to do those things. In my view, they're not legal and shouldn't be part of the program."

Jim was there, but Jim wasn't really a participant, but he did support what they wanted to do. Anyhow, we had an audience in a private conference room. I was at one end and they were all five at the other end, and Joe sat in the middle. He said, "Okay, I want to hear your side of the story," and they all told him how I was incompetent and destroying their program indiscriminately.

Then Joe asked my side, and I gave him my explanation as to why I felt the way I did. It was really quite a show. It surprised the hell out of me. But when we got done, Joe said, "I want to talk to you," and I went, "Oh, God, here we go." And when I got to his office, he said, "Well, it looks like it's five against two. It's me and you. Now, what are we going to do about this?" (laughter) So I felt better after that.

But we did, in fact, have some problems. There were extremely heavy-handed techniques and totally inappropriate, in my view, for dealing with landowners and people that you just don't walk on. So that's kind of where I developed my, I guess, attitude of trying to resolve issues and problems by reaching agreement through some kind of a discussion process and not necessarily always compromising, but at least making sure you understand what the other person's position is in trying to recognize it before you jump off the deep end and start into a brouhaha.

Leaving Billings and Going to Work on the Alaska Natural Gas Transportation System

There were other problems and issues, but probably too numerous to talk about. Anyhow, I ended my association with that office in 1980 on extremely good terms with Joe Marcow, the R-D, probably not so good with Jim Rawlings, because by that point in time I had been in his position for four or five months and I couldn't see any need for the assistant position, and I left probably a "burn your bridge behind you" memorandum for the R-D, which was my assessment of the division and how it functioned and what was necessary and what wasn't. And in closing the

memo, I said, "And by the way, the assistant position down here is really unnecessary. Supervisor of water and land can deal with these issues and should deal with them."

So Jim found out about that memo, and he expressed his displeasure with me at one point, although he was polite about it. But I was convinced that the whole operation there was destined for disaster, and over a period of time they did get cut off from their Soil and Moisture Conservation funds and there were questions raised about how they dealt with some of the other issues and so on.

Anyhow, by then the Alaska Natural Gas Transportation System was in the headlines. We're coming up on 1980 now. Oh, by the way, I didn't discuss my Little League activities.

Storey: Yeah, tell me. With five girls, right?

Schroeder: Five girls, yeah. I, for some reason, right after I got back to Billings in '76, I got collared by somebody I didn't even know, but a friend of mine was a friend of theirs and they'd given him my name. They were having a political battle in the Little League out in Billings Heights, and they asked me would I go to a meeting for Little League. I didn't even know what Little League was; I'd just gotten back. So I said, "Sure." Well, the next thing I know, these guys nominate me to be president of a Little League, where I don't know anybody that's sitting in this room, there's about six or eight people, and there's two factions. And one side's got three votes there and I think the other side had two, so they prop my name up there. "Here's Dennis Schroeder, and he's our candidate." And they had three votes, so they voted me in as president of the Little League. (laughter) Oh, God, I didn't know what I was getting into.

But for then the next three years, '76 to '79, I was president of the Billings Heights Little League and ran that program. We wound up–and you mentioned that I had five daughters–and we incorporated the girls into the program. We, in fact, incorporated girls into the baseball program if they wanted to play baseball. We opened the rules up that they could play, and built the program from when I took over about 400 kids, I think, and maybe a $10,000 operation to over 700 kids and, geez, I had a $35,000 budget by the time we got done.

We built several ball parks, put in sprinkler systems, put up backstops, built dug outs. God, I spent more weekends and more evenings pouring concrete and putting up fence and gluing together irrigation pipe than you can imagine. And

printing out fliers to parents. I'd print 5 to 600 fliers to every kid in the league, and it was really disappointing because I had two or three faithful fathers who would show up to help on each project and they were always the same ones, for the most part. And a couple of them were even coaches who did double duty as coaches and then helped build things. It was amazing how little participation you get from the parents in those things. They essentially wanted to give their 20 bucks to pay the registration fee and then have you babysit with their kids at least two nights a week for the three- or four-month period.

But it was educational for me, and interesting and a lot of fun, and we'd have a big event to kick off each year, which was the parade of teams around the field, and everybody had a big picnic and pot luck. I made a lot of friends at it. We built a significant program and had a couple interesting encounters with irate fathers who would threaten to beat up the umpire or something. As president of the league, of course, I couldn't allow that to happen. (laughter) So then I became the object of their displeasure on several occasions, but luckily never did get in a brew or a fist fight over anything. But again, it's really amazing how people react to that stuff.

Anyhow, that was kind of an aside. It was part of the Billings, Montana, operation. My daughters all–well, four of them, one was still too young to participate, but four of them did play baseball or softball in the league. So it was nice to do, but not something I would want to do more than three years.

Storey: Not a lifetime career, huh?

Schroeder: Not a career, no. Many frustrations.

Anyhow, by that time I had gotten a call from the Federal Inspector's Office, and found out they were initiating the implementation of an office to oversee the construction of the Alaska Natural Gas Transportation System. They wanted to know if I'd be interested in applying for a position. I was a little bit distressed, because this was only a couple of months after our discussion with the regional director about my treatment of the staff. So I was interested, and I told him I would be interested. So they offered me the prospect of either going to San Francisco and being head of the San Francisco office or going to Omaha, Nebraska, and heading up the eastern leg of that system.

Storey: As I recall, that came down and then split and went West and East.

Schroeder: Yes. It splits while you're still in Canada and one segment goes down through

Idaho–

END SIDE 1, TAPE 2. MAY 21, 1996.
BEGIN SIDE 2, TAPE 2. MAY 21, 1996.

Schroeder: ... into Minnesota and ends in Ventura, Iowa.

Storey: The split pipeline.

Schroeder: The western leg and the eastern leg, which is called the Northern Border Pipeline. So I selected Omaha. Then went to Omaha, not knowing really what I'd gotten myself into, and the first thing I had to do was hire a staff, and I knew not what kind of a staff I needed to hire. So after several weeks of thinking and gyrating, I finally hired an environmentalist who I'd worked with in Billings named Dean Loomis [phonetic]. He came down and I hired a staff of, let me see, four field inspectors and an assistant who served as my office hand, Carlos Geminis [phonetic], and we started over viewing the design specifications and the quality assurance manuals, all the same types of things we did on the Alaska Pipeline, except this time I got in at an earlier stage and was involved in some of the office activities as well as the field.

Storey: Tell me why you chose Omaha instead of San Francisco.

Schroeder: My home was back in Muskatine, Iowa, which was on the eastern side of Iowa, and Omaha was closer. California just never did intrigue me. I had that opportunity to move to California. I had gone down to California in 1977 and interviewed for a job with a consulting outfit and didn't go. They made me a pretty good offer, but I didn't go because I really didn't want to move to California, and I still don't and wouldn't, even at this point in time. But it was an opportunity to get back into what I really enjoyed, and that was the pipeline work. Plus I knew Omaha, had been through Omaha on many occasions, and again it was closer to my old homestead. So it made sense.

We set up the office, and then over a period of time, the Northern Border, the gas company people, I got to know them. They got accustomed to my methods of operation, and we became–at least our relationship was amicable and they respected what I told them my needs and expectations were, and they had some pretty damn decent people working for them that agreed to abide by our requirements and do everything they could to cooperate and coordinate with us. So we hit it off pretty well, and I think the construction went pretty well for the most part.

Again, this time we're passing through farm country, and prior to construction we went out and had public meetings and explained what our office did and what was going to happen and how the pipeline construction would progress. We went through North Dakota, South Dakota, Minnesota, had meetings in various areas. Again this time we were up front in the process, and it's a whole different deal than the Alaska experience, when construction was already under way when I got there. So it was really enjoyable. This was a 14/15 job. So I'm working my way up the GS pole and getting experience in a lot of different areas at the same time.

Storey: Was it a promotion for you from Billings?

Schroeder: Let me see. From Billings it was not a promotion, but it was a promotion. Remember I said I was acting in the job in Billings, well, I was still acting when I left and I had been acting for over a ninety-day period, so I had a temporary promotion to the 14 level in Billings, but it wasn't permanent.

So I went to Omaha, it was a 14, with the stated plan to make it a 15 in a year if I did the job right. So it was an opportunity.

Storey: When you were developing the guidance and so on for the construction and how you were going to operate, were you doing that in concert with San Francisco, or were you pretty independent? How did that work?

Federal Inspector's Office Responsibilities of the Gasline Project

Schroeder: Well, it wasn't in concert with San Francisco, it was in concert with Irvine. We had an office in Irvine, California, which was our engineering–it was the Central Engineering Corps of the Federal Inspector's Office. The Federal Inspector's Office was only about 140 to 150 people. This is a small office. And that's the whole thing. They had a staff in Washington, D.C. They had a small engineering staff in Irvine, and then they had the western leg in San Francisco and our office in Omaha. My staff was only comprised of eight people, and San Francisco was about the same. The biggest staff was in Irvine.

We served as the coordinator of the review process, and we would get the material and packages from the gas company and we would transmit them to our Irvine office for review, and then we would track their review process and they would ship back their review comments, and we would then get those review comments to the gas company, who would respond, either make the changes

according to the comments or respond why they didn't feel this comment merited attention. Then we would have to hammer out the differences of opinion. So it was a coordination process, but we were involved, too. When there was a disagreement, we usually had to see, at least from our perspective, if it was right or wrong and convince the–well, now we have the federal inspector instead of the authorized officer, and give him our recommendation on which way to go on different issues.

So they were doing the same thing out of the San Francisco office. So while we weren't coordinating with San Francisco, Irvine was looking at both packages and making sure that there was consistency on how this thing came together for both legs of the pipeline, even though they were different gas companies doing the construction. So that's how it worked.

The Federal Inspector's Office, it was kind of interesting, because they had learned some lessons on the Trans Alaska Pipeline. So the federal inspector was not under an assistant secretary now, the federal inspector answered directly to the Vice President of the United States. They elevated the position. They also gave the federal inspector more authority in that if Fish and Wildlife Service was dragging its feet to issue a 404 permit, or E-P-A [Environmental Protection Agency] was dragging its feet, the federal inspector had the authority to go in to that federal agency and prod them forward in their permit processing. As a matter of fact, jurisdictionally he could have demanded that they issue the permit if he thought they did not have a solid ground to stand on in terms of non-issuance.

So the authorities were elevated. The prestige was elevated. It was based on the experience from the Trans Alaska Pipeline where the authorities were left with the respective agencies, and in some cases it became extremely difficult to get permits moved forward. With the authorized officer having no authority to really do much more than complain about it, why, they decided to correct that. So just the threat of having their turf taken away by the federal inspector created enough of an incentive that we got all the permits pretty much issued on time and were prepared to proceed with construction, and didn't have to assert the real authority that he had been provided. But it made it a different ball game. Anyhow, things went pretty well.

We did have a weld problem again on this pipeline. You'd have thought I'd have learned. But it was a whole different issue on this one. It wasn't a matter of intentional falsification of welds. It was a matter of interpretation of the welds by the readers, and they had a quality-assurance process and an oversight process where you'd have different readers come in and do spot checks. It turned out that

some of the second and third readings by different people were questioning flaws that were showing up as what the second and third readers were viewing as small cracks in the weld that had not been picked up by the first reader. And so once that issue became known, again, they had to go back and review every weld and every film and any place these cracks showed up on the film that had been missed by the previous reader, had to go back and dig up the pipe and exam the weld, verify the crack, and then repair the weld.

It wasn't as extensive as it had been in Alaska, and it wasn't as difficult, because the terrain wasn't as difficult, but there were, oh, God, 4 or 500 welds that had to be dug up and repaired on that pipeline, too. But I think it's as much a part of the technology and the qualifications of the readers as anything. It's just the way you read a weld and film. I'm certainly not a radiographer, but the guy we brought in was from the American Standards in Testing Materials Lab, I think back in D.C. And he essentially told me this is not really anybody's fault, it's just a consequence of the reading process and the way it was set up.

At any rate, we got it corrected, and the gas line has been functioning very nicely for, what–we completed construction on it in 1983. So it's got thirteen years of operation.

Storey: The Inspector's Office, was it the same inspector?

Schroeder: No.

Storey: How did they come after you?

Working for the Inspector General's Office

Schroeder: The person that headed this up, again, was an ex-Corps person, but he had also worked with EPA under their grants program. His name was Jack Rhett [phonetic]. He didn't come after me personally, but when he set up the Inspector's Office, he knew that there was a lot of experience that had been attained by people who worked on the Trans Alaska Pipeline. So in the process of starting out hiring his staff, they contacted some of the people that had worked on the Trans Alaska Pipeline to see not only if they wanted to work, but who else they knew that had been in that activity that they thought would be a good employee to bring on board on this project.

So that's how my name got into the picture. I don't know who told him

about me, but I got a call. There were a couple of gentlemen coming through Billings, Montana, again to talk to B-L-M, and once they found out I'd be interested, we met for breakfast one morning. I talked with Peter Cook, who was the deputy federal inspector out of Washington D.C., and, oh, God, another old gentleman that died a couple of years later. Geez, I hate to forget the names. But anyhow, he and I became good friends. But we had our interview and they left, and it wasn't too much after that I got a call and they said they were interested, but were still waiting for a permit or some action by Congress, I think, before they could proceed. So they put me on hold for about a month and a half. Then finally I got a call and they said, "We're ready to go. Can you be in Omaha on this date?" And I said, "Sure."

Storey: Were there quite a few other people from the Alaska oil pipeline who came on to this project?

Schroeder: Yeah, there were. Yes, there were. A lot of them stayed in Alaska. See, ultimately this thing was going to flow–they were going to construct the Calgary gas fields first and bring down the "Y" through the eastern leg and western leg and connect it to the Calgary fields. Then sequentially they would move into Alaska and the United States would construct the Alaska portion over to the Alaska-Canada border, and Canada would construct their portion of the pipeline from the Calgary area on north. Coincidentally, Canada had assigned a Canadian counterpart to the Federal Inspector's Office. I made a lot trips to Calgary and associated with that office quite a bit on issues that we had between our two organizations. But that was the plan. So there was an Anchorage office that was preparing for the construction on that northern end.

Gas prices were in an economical range when we started the project. By the time the project was completed, I think they were anticipating $4-and-something per thousand cubic feet, rings a bell. That was the anticipated price the gas was going to go up to. In reality, gas not only didn't go up, it dropped in price and went down to about $1.90 a thousand cubic feet, I think. So the economics weren't there when we completed construction of the southern leg. And it was obvious the gas prices weren't going to get up to any kind of an economical price in the near future, so they had to make a decision as to whether to proceed on that thing or not. It was estimated at that point in time a $40 billion project, and nobody was going to invest $40 billion in something that was going to lose $3 per thousand cubic foot of gas to ship it down.

So it fell apart economically. So the northern leg has never been constructed

and the gas that's flowing through the pipeline is still coming out of Canada. They're still pumping the gas into the permafrost in Prudhoe Bay. There's just no way to get it down here. But there is talk now that as the oil fields start drying up, and their life span was twenty to twenty-five years, that they will convert the oil pipeline to bring gas down and possibly liquefy it and ship it to Japan or other places. There's some conversation starting on that at this point.

Storey: Use those huge tankers they were postulating, as one of the alternatives to the pipeline, I think.

Schroeder: Yeah. Yeah. But the economics put us out of business in '83 when the northern border was completed.

So now I'm back looking for another job. They had an assistant project manager position that was being advertised in Bismarck, and I got a call from Don Glaser. I had maintained contact with the Billings office, and Don was in Billings. He called and indicated that they'd be interested. They were aware because Dean Loomis had departed and gone back to Billings to his old position in the environmental group in Billings, so they knew our work in Omaha was coming to an end. So they asked if I'd be interested in going to Bismarck. I really didn't want to, but my alternative was an offer with the Federal Inspector to go to Irvine, California.

Storey: We've already talked about that.

Returns to Reclamation, Again

Schroeder: I already told you about California, in particular moving out to Irvine, which is an expensive area with five kids, just didn't intrigue me at all. So I went up and talked to the project manager, Darrell Crawl [phonetic], and we seemed to hit it off pretty good, so they offered me the job. So this time I moved more or less on a directed reassignment, because it was a downgrade now. I was moving from a GS-15 back down to a 14 position, 14, step 10. I got the whole salary, but not great. Which I didn't care about. Hell, I knew the pipeline position was elevated because of the time frame and because of the nature of the position, and some people get awfully excited about taking a downgrade. As a matter of fact, my assistant was so insistent on not taking a downgrade, it took him six months to get another job, and when he got one it was down in Mexico, and as it turned out, it was a lousy decision on his part because it turned out to be a pretty bad job, whereas my downgrade didn't bother anything financially and I got a damn good job out of it.

Storey: And you went to Bismarck?

Schroeder: Yep, then I went to Bismarck on an icy, rainy March day.

Storey: Of 1983?

Schroeder: Of 1983.

Storey: Well, you know, I think we're right at a breaking point, and so I'd like to ask you whether you're willing for the information on these tapes and the resulting transcripts to be used by researchers.

Schroeder: Sure.

Storey: Good. Thank you very much.

END SIDE 2, TAPE 2. MAY 21, 1996.
BEGIN SIDE 1, TAPE 1. MAY 24, 1996.

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation, interviewing Dennis Schroeder, Phoenix Area Office manager, in his offices on May the 24th, 1996, at about one o'clock in the afternoon. This is tape one.

Last time after we quit taping the interview, you mentioned that to come back to Reclamation you basically have to have a sponsor. Could you talk about that a little bit?

Schroeder: Well, I think in the two times I left Reclamation, I really left not in anticipation or with a career plan that would automatically redirect me back to the Bureau, but simply moving on to a different job in a different agency and without knowing what the future might hold. It wasn't clear that I was going to be a Reclamation employee for the duration.

In just thinking back, when I came to the end of the job in Alaska, after leaving Billings, Montana, the opportunities back in the Lower 48, there were various ones, but, in fact, when I applied for jobs within Reclamation, and even without applying, people who were hiring would call and ask for an application, which indicated to me that it was important that I not burn bridges when I left an organization, and important to have the respect of the people. Even though you left the organization and they disagreed with your departure, the opportunities would be

there to get back in, if, in fact, you'd done your job and had left on a friendly basis.

It happened both times, I guess. I indicated that when Jim Rawlings, who was my supervisor before I left Billings and went to Alaska, he did not necessarily agree with my going, but he didn't hold grudges. And when he had a job opportunity, as I came out of Alaska, Jim contacted me and simply requested that I put in for the job. When I left Billings in 1980 to go to the Federal Inspector's Office, again that was–I was leaving Jim Rawlings as a supervisor, but, in fact, when the job opportunity came up in Bismarck and the job was closing down with the Northern Border Pipeline in Omaha, Don Glaser, who I knew in the regional office, indicated through Joe Marcotte, again they asked if I would be interested in moving into the position in Bismarck, which I appreciated, because I did not want to go to California, which was the alternative at the time.

So I guess maybe "sponsor" isn't the correct word, but leaving on friendly terms and having the respect of the people you left created opportunities to come back to the agency after I left.

Storey: And then in '83 you did come back.

Garrison Project

Schroeder: In '83 I came back and went to Bismarck, North Dakota, as the assistant project manager. Darrell Crawl [phonetic] was the project manager at the time. It was kind of interesting. The Garrison Project was, at that time, picking up a head of steam. It had been pretty well torpedoed during the Carter administration era, and the budget had been slashed. The staff had been slashed and they were in the process of rebuilding from the first Reagan administration and had received additional budget, were hiring staff. In the process, the construction had gotten going again.

So when I came out of Omaha in March of '83, it was with the understanding that by probably '84-'85, Darrell Crawl would be moving on and they wanted to get me attuned to the project and into a position of being available to become the project manager when Darrell's departure occurred. As it turned out, and the reason for that was Darrell had been in the S-E-S training program and the anticipation was that when he got through with that–he was still in it when I got there–when he got through with that, he would move on to an S-E-S position at some point in time, and I would be ready then to take over as project manager. That was the goal. It never turned out that way. But that's how I got to Bismarck, North

Dakota, on an icy, rainy, snowy March afternoon.[5]

So I spent three years in Bismarck, and the first year was great. The program was going great guns. Construction was ongoing in several reaches of the system. We had the New Rockford Canal under construction. A lot of land issues, a lot of fish and wildlife issues. Lonetree Dam was to go into construction within the next year, in '84. We were hiring staff, and it was pretty exciting time for that office. We built from a staff of about 115 or 120 up to a staff of about 165 to 170, and that was in the '83-'84 time frame.

Then we hit the fall election, the second Reagan administration. Jim Watt had been the secretary of the interior, and in preparation for the election–and that was about the same time Jim Watt made his statement about he had, I forget what it was, but he had a cripple and a black and a Jew, and it was statement to the press on an advisory team he had formed, and that started his fairly quick downfall. I think the general consensus was they had to get rid of Jim Watt before the election. So within a matter of months, he was gone and Judge [William P.] Clark was appointed as secretary of the interior, and he was a much more laid back, moderate person than Jim Watt, obviously.

At that point in time, the Audubon Society had gone on a major nationwide media campaign against the Garrison Project, and the Congress appointed the Garrison–I forget the exact title of it, it was the Garrison Review Commission [Garrison Diversion Unit Commission] or some such name. But anyhow, they appointed a blue ribbon panel to again do an overview of the Garrison Project to determine whether it should or should not continue as it was currently configured. So through 1985, all construction came to a halt, and we were again stalled out. And as a matter of fact, Lonetree Dam, which at that point in time we had spent $13 million and had brought the dam from the foundation excavation and back filling in the foundation material, it was back up to ground level, and the contract was closed down at that point in time. As the commission went through its process and reached their final decisions; a determination was made not to build on Lonetree Reservoir.[6]

So we have a $13 million foundation sitting in the ground in North Dakota as a monument to the Garrison Project and the futility in which the North Dakota

5. SES is Reclamation's Senior Executive Service.

6. For more information on the changes made to the Garrison Project and reference to the Garrison Diversion Unit Commission, see "Garrison Diversion Unit Reformation Act of 1986," in *Federal Reclamation and Related Laws Annotated (Preliminary)*, Volume V of Five Volumes, Donald L. Walker, editor (Denver: United States Government Printing Office, 2001), 3464-5.

people found themselves. So construction halted. The whole project was reconfigured. It became much more oriented toward municipal/industrial water. It had a major Indian component then attached to it. Additional fish and wildlife mitigation requirements were encountered, and the final decision was the Lonetree Reservoir would not be built, construction essentially came to a halt, and we started downsizing the staff again.

Storey: There must've been some concern in North Dakota about all of this. What was going on politically?

Schroeder: Politically the North Dakota delegation, North Dakota rallied around the project. I have never seen a state so united behind a project. Their position was the project was owed to them. They lost a lot of farm land and flooding of the Missouri River, both in Oahe Reservoir and in the Garrison Reservoir pools, and that they were owed this project by the federal government and irrigation was what they wanted and what they should have. As a matter of fact, the legislation, legislative body in North Dakota, voted 100 percent to reconfirm the fact that they felt the federal government owed them Garrison Project and that they should continue construction on the Garrison Project as it was laid out at that time.

They felt betrayed for the second time by the Department of Interior, because the blue ribbon commission had been established and the funding had been halted. But North Dakota, politically, was behind the Garrison Project and the 250,000-acre irrigation component that was in the plan preceding the 1985 commission. I think as the commission went through its process and they held four or five different public hearings that were well attended in North Dakota and the state engineer and the Water Department of the state testified, there was a lot of testimony by the Garrison Diversion Conservancy District, but over a period of those public hearings and getting the sense of where the commission was headed, it became apparent to them that they were losing the battle. They were winning some minor skirmishes, but the cornerstone of the project was the Lonetree Reservoir.

That's where the focus was by the environmental groups, and they managed to hammer and hammer and hammer on the point that the potential of fish transfer to the Canadian drainage and the impact of the Rainbow Smelt in the Canadian drainage in Lake Winnipeg would be devastating, and the net result was Lonetree Reservoir, the jewel of the project, was dying fast.

Finally, towards the end of the process, the North Dakota political powers decided they'd better accept a half a piece of pie as opposed to throwing the whole

thing out, so then they negotiated a project that included a large rural water supply system that was already planned and headed for construction, but with the transferral of Garrison money in that direction, that satisfied the environmentalists that was a none controversial direction to use the funds, it supplied North Dakota with still a component of federal funding for the state. So that's basically where the politics went.

I think the state, at that point in time, thought they'd better cover their flanks and take what they could get, but they still held in their hip pocket the notion that they would, at some point in time, come back to Lonetree Reservoir and attempt to get it back in the construction program. To date, that has not happened.[7]

Storey: Were you assigned specific responsibilities?

Schroeder: In Bismarck?

Storey: Yes.

Responsibilities on the Garrison Project in Bismark

Schroeder: Well, I don't know a specific. I think, as it turned out, Darrell was a detail person. I have never been a detail person. They were involved in preparation of major environmental impact statement, and Darrell was a hydrologist, really liked to get into the nuts and bolts of the hydrology on the James River, and he occupied an awful lot of his time in that area. So the general day-to-day office operation, dealing with personnel issues, dealing with the construction group and engineering designs and directing basically the decision process on things that would come up during the course of the days or weeks on land resource issues and environmental issues and so on, kind of fell in my lap, which was fine with me because that let Darrell occupy his time with an area that he enjoyed and was important to the project, and gave me the freedom to do my thing with the staff issues and the day-to-day issues that we ran into.

So we kind of carved out each our own niche and it worked really well. I got along fine with Darrell, and as it became clear where my talents resided and what I could do to assist him best, it fit pretty well in what was, I thought, a pretty good team effort up there.

7. For more information on water development in the Dakotas, see Peter Carrels, *Uphill Against Water: The Great Dakota Water War* (Lincoln: University of Nebraska Press, 1999).

Storey: You were there three years?

Schroeder: I was there three years.

Storey: And the office was downsized while you were there?

Schroeder: The office, when I left, was back down to about 115. Our construction money had been taken away. In 1985, after the commission completed its process and came out with its recommendations, it was obvious Lonetree Dam was not going to be built. So we had to start closing down the Harvey office. The New Rockford Canal was scheduled to be constructed for the reaches of that. We had to close that down. We had activity down in Oaks, North Dakota, to close down. In the process, we had reduced staff size fairly substantially. We dropped about a third of our staff.

I guess the other thing that happened in that process was the Upper Missouri and Lower Missouri Regions were combined. Joe Marcutte was dismissed as the regional director in Billings, Montana, and Bill Martin was assigned to be regional director of the combined Upper and Lower Regions, which was then went from the Upper and Lower Missouri to the Missouri Basin Region, Missouri River Basin Region, I guess. So there was a lot of upheaval both with the project and within the region at that point in time.

Storey: That made you think you ought to move?

Schroeder: Well, yeah. The project was obviously, if not dying, had taken a whole different turn away from major construction of irrigation facilities to passing money through to the state for the rural water project and assembling plans for the Indian projects, which were, at that point in time, fairly nebulous, but had been made a part of the planning for the future.

It was kind of coincidental, but in 1984, I think in May, I'd gone back to Washington D.C., to the Project Managers' Conference. That was the conference where Jim Cook made his famous speech about how bad the Reclamation managers were and how they had slush funds hidden all over the place. Jim did a good job of pissing everybody that was in the conference off and as a consequence, the outcome was that the regional directors and the influential project managers were trying to get Mr. [Robert N.] Broadbent to chop Jim's head off, but that, of course, never happened.

But after that conference, I rode back from Washington D.C., with Darrell

Webber, who was the assistant commissioner for engineering and research at that time. Darrell had given a speech in D.C., and so we sat side by side. I didn't really know Darrell, but we talked for the four- or five-hour plane ride back out of D.C., and got to know each other a little bit. That was '84, and I hadn't heard anything from Darrell in the interim, until 1986, when they established a team to look at the future of the Bureau of Reclamation.

Back to Denver and the Strategic Planning Group

I got a phone call from Denver, and they wanted to know if I would be willing to sit on a team, and it was the Strategic Planning Group. It included Rollie Dolly [phonetic], who was the right arm of the commissioner at that time, Roland Dolly, I should call him, and Darrell Webber. It was Darrell's initiative that Commissioner [C. Dale] Duvall had implemented this effort to look at where Reclamation might be going in the future. Terry Lynott was on the team, Roger Patterson and Frank Nell and Rick Gold. Why they selected a little old assistant project manager out of Bismarck, North Dakota, to get into that effort amazed me, but I didn't have any reason not for participating.

So feeling a bit uncomfortable in the role, I accepted that duty, and for a period of about six months we worked as a team and put together a report, the Strategic Planning Group Report, on the future of the Bureau of Reclamation. I got to know Darrell very well through that process and the rest of that team and reestablished some ties with Denver that had been long since left, you know, fairly out in the cold.

The team, after it completed its report, issued it to Dale Duvall, and about that point in time, Jim Ziglar came into the assistant secretary's position and Broadbent had subsequently departed. So now we've got another new cast of characters. When Jim Ziglar came in, he decided that he didn't want a product produced by Dale Duvall and the Strategic Planning Group, and so our report essentially hit the file or the waste basket, whichever, and Jim Ziglar appointed Joe Hall to do a strategic planning effort.

So that took off down a different path in the 1987 time frame, but in the interim, the deputy assistant commissioner for engineering and research position had become open and was advertised. Bob Towles headed for Phoenix, Arizona, and I got a call from Darrell Webber. He had reviewed the applicants for the job and indicated that he didn't really want to make a selection from what he had, he wanted to broaden it out a bit, and would I be interested in applying for the job in

Denver.

So I said, "Well, I don't really fancy myself as a high-powered design engineer anymore," and Darrell assured me that wasn't the role of that position. That it was more of a decision mediation, day-to-day operations, attend meetings and arbitrate and mediate the processes around the E&R Center.

So I went ahead and put my application in for that job, and went down to interview Darrell Webber and flew down on the same plane with the project manager, Darrell Crawl, and we had back-to-back interviews with Darrell at that point in time, which I found a little bit uncomfortable, because we had both put in for the same position, but, in fact, I knew that Darrell had gone through the S-E-S training, which I hadn't. Darrell had much more experience at the project manager level than I had, and I essentially felt that Darrell Crawl probably was better qualified to move into that position than I was.

So we went through our interview process, and lo and behold, I was selected for the position not too long thereafter. So now I'm packing my bags and heading for Denver, and this was in May of 1987.

Coincidentally, Darrell Crawl had turned in his resignation. In June of '87, Darrell left the federal service, so Bismarck at that point in time had been left essentially leaderless for the project manager's office.

Deputy Assistant Commissioner for Engineering and Research

But now I was in Denver as the deputy assistant commissioner for engineering and research, and the first assignment was to look at the organization and work with the division chiefs to formulate a reorganization of the E&R Center. So I jumped from the frying pan into the fire. Now I'm in the field. I'm the second-in-command in an office of 110 people of various professional backgrounds, and now I'm right in the middle of 840 or so fairly high-powered engineers and technicians all tied in with design processes and very technical research work. I felt like a fish out of water for a while.

My first order of business was to try and get to know and establish a rapport with the division chiefs, which included Bill Frazier. I'm trying to do this knowing full well that some of these gentlemen had no doubt put in for the job that I had been selected for. So anyhow, I settled in and got to know Bill Frazier and Steve Markwell, Frank McLean, who was head of research. Steve was head of geology.

John Smart, at that time, was chief of the Embankment Dams Group. Those were the key figures. I've probably left a couple out. Anyhow, we had a team consisting of the division chiefs headed up by me as the deputy, and were planning a major reorganization of the Engineering Research Center, as it was at that point in time. That process took the first six months of my time in Denver.

There were various issues that came up in day-to-day work. My job there, as I became accustomed to what was happening, dealing with the flow of paperwork through the office, essentially I came to do about the same job I'd done in Bismarck, and that is serve as the first line for processing paperwork, signing all of the paperwork, dealing with the internal meetings and trying to help reach decisions within the office, not on the really technical stuff. That was pretty much up to the engineering staff that was there, but assisting them in reaching decisions on various things, and coordinating internally with the other groups in the office. It was interesting, although I've got to admit–

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BEGIN SIDE 2, TAPE 1. MAY 24, 1996.

Storey: You were saying that for a little while you felt like you were in over your head.

Schroeder: Yeah. Well, it was a different arena that I was accustomed to, as I said before. I left the E&R center in 1972. This is 1987, so there's a fifteen-year hiatus between my being involved in any detailed technical work, and now I'm surrounded by people with "Doctor" on the front of their name, having designed dams and power plants and done research in many areas, which I was not familiar with. So yeah, I am their titular leader, at least in the day-to-day activities, and I felt like I was walking through a mine field sometimes, because, again, some of them felt that they deserved the job, not some yo-ho from Bismarck, North Dakota, that several times had disappeared out of Reclamation and then had wrangled his way back in.

You can imagine the thought process that might have taken place with some of them. For the most part, that wasn't an issue on the surface. I mean, those that might have had some of those feelings concealed them well enough that it didn't interfere with the day-to-day work. And I had some allies in Denver. As I said before, I'd worked with Walt Long, who now had worked his way up the ladder and was one of the respected engineers in the organization. There were others that had known me before, although it was fifteen years before. There was enough of a cadre in there that they were willing to let me either hang myself or succeed, without doing anything obvious to try to impair that process, and it worked out

fairly good.

The second year I had gotten to be friends with Bill Frazier and Steve Markwell, John Smart. John was always there with issues, and a bulldog in dealing with his point of view. I had played racquetball with John in the evenings, got to know him fairly well, and became pretty solid friends, I think, with John, too. Developed a rapport and some amount of respect amongst the group. So after the second year, into the third and fourth year, it was a pretty good relationship, and they knew that the issues were better brought to my office probably to try to deal with than to take them in to Darrell. Darrell had the outside activities, the political scene, working with the regional directors, working with the commissioner, working with the professional organizations outside of the E&R center. So he had his plate full, and internally working with the division chiefs, I thought we had a pretty good team.

We consummated the reorganization; we changed the titles of several of the divisions; we realigned the division chiefs; moved Smart in charge of civil engineering, and did a fairly major overhaul with pretty decent success; and at the same time were continuing the implementation of the matrix organization. In 1988 we came in with the total quality management concepts and tried to infuse them in the organization. So it was a time when the organization was having some troubles in maintaining the workload and maintaining the size of staff that we had, but, in fact, we were making some major adjustments to accommodate moving into what appeared to be the future of where we were headed.

Storey: Why was it necessary to reorganize?

Reclamation's Reorganization

Schroeder: Well, I think it was Darrell. Darrell was pretty good as a visionary. I think he could see that the old-line organization just wasn't going to cut it if we didn't make some changes. The big jobs were not coming to pass. The Central Arizona Project was well along in terms of design by that point in time. The Central Utah Project, also, the designs were well along on it. There was nothing to replace those major projects, and Darrell could see that coming. He felt that we needed to readjust the organization to prepare for the future, to get it better aligned to deal with the matrix organization, and to consolidate some of the design groups. We had some duplication of effort in areas that he wanted to address and, in general, just try to streamline it somewhat.

We eliminated, I think, several divisions in the process, in the terms of the consolidation, wound up with four major divisions. I guess that's what drove most of it, just an attempt to get prepared for the future and to cut off some of the flab and eliminate some of the supervisory boxes that existed, so we did that, not to the extent that came later, but we did manage to eliminate some of the supervisory layers and consolidate some groups so that the turf issue wasn't a constant problem within the organization.

Storey: And you were there how long?

Schroeder: I was there four years almost down to the day. I got there, I guess it was technically in April of '87, and I left in May of '91. So I was there almost a little over four years.

Storey: Why did you leave?

Schroeder: Well, there again was an interesting process. By this time, Dennis Underwood was commissioner. The regional director in the Lower Colorado Region, Ed Hallenbeck, had decided to retire. So he had left, and so there was a job open as regional director in the Lower Colorado Region. I had gotten to know Dennis Underwood, and of course I knew Darrell very well at that time.

The Move to Phoenix

They came to me; Dennis Underwood essentially came and made a proposal. The proposal was this, that he said, "We can do one of two things, we could make you regional director in L-C, but we've kind of targeted Bob Towles for that position, which would leave the Phoenix project manager's position open." So he said, "I'd like you to consider going to Phoenix for three years. The Phoenix office is reaching the peak in terms of its construction, and you need some rounding out by getting in the political end of things, and in Arizona there's a lot of politics. So if you would consider going to Arizona for a three-year period, the anticipation would be then that by that time Darrell may be retired and we'll bring you back into Denver as the assistant commissioner for engineering and research."

So, you know, project manager, particularly the biggest project in the Bureau, was something that I obviously was interested in, and so I agreed. That was the plan, to go down to Phoenix, Arizona, spend three years getting into the nitty-gritty of the politics and rounding out my interpersonal skills, I suppose you would call it, and developing my political savvy, and then in the end probably moving back

to Denver in the '94 time frame to head up the E&R center.

Obviously the first part of that worked out. I did move to Phoenix. I did become the project manger. Bob Towles went to the region and became the regional director. But the election of '94 kind of blew everything sky high in terms of finishing that process, and by 1994 I had reached the decision myself that I really didn't want to go back to Denver and be the last of the "chief engineers" that was responsible for dismantling and decimating the technical prowess of the Bureau of Reclamation. I just didn't see that as a very romantic position to be in.

So–I'm kind of jumping–to jump forward to '94, in November '94, Dennis Underwood came through Phoenix, Arizona, and Dennis, to his word, remembered the deal and he offered me the opportunity to go back to Denver. This was in late November, early December, when he finally came through for the last time. The election was over. The Republicans had lost the election, and he said, "We can get you back to Denver if you're ready to go." So I declined the offer because, in the first place, I was uncomfortable in doing that because the first place the next administration goes and looks is who's filled new jobs and where, because obviously each time that's sometimes that's what happens, I guess, is they stick people in positions just to hide them. I didn't want that, plus I enjoyed the job in Phoenix. I had a lot of latitude in the job with Bob Towles as R-D, and I was comfortable and knew that in Phoenix we had a mandate to complete the project and initiate downsizing, whereas in Denver it wasn't that clear.

The process up there was going to be one of difficult decisions and struggling with the work load and how to deal with the diminishing resources and diminishing work load, and it just didn't excite me to think about going back into that kind of an atmosphere, so I choose to stay in Phoenix. I thanked Dennis, but told him, "No thanks, I'll finish out my career in Phoenix, Arizona."

Storey: What were the major issues when you came to Phoenix?

New Waddell Dam Issues

Schroeder: Oh, God, the construction was moving along, well funded, rapid pace, large contracts. New Waddell Dam was under construction, but they were still in the foundation area. The major issues, strange as it may seem, that I encountered was trying to deal with Maricopa Water District and Joe Falbol [phonetic] on the issues surrounding the federal government's takeover of their facilities at Lake Pleasant and the Old Waddell Dam. There was a lot of animosity, a lot of bickering and

fighting.

The water district had gone to the department, I think it was possibly the Board of Contract Appeals, claiming that Reclamation was in violation of the 1988 agreement. The water district was threatening to not issue, or not apply for the state permit that was necessary to destroy the Old Waddell Dam before they could allow the water to flow into the lake and get behind the New Waddell Dam.

All of the issues were how to settle the things that had been agreed to in 1988. There was a total different interpretation between Reclamation's engineers that were at Phoenix and Joe Falbol and his board of directors with the water district. While it was just a small portion of the project economically, it had the potential of delaying the start up of the P-G plant at New Waddell, because unless they get that permit, there was going to be no generation of power and there would be no new water in the lake.

They had looked at condemnation of the Maricopa Water District facilities, and in the process of reviewing that with the Justice Department and the Solicitor's Office, determined that that had never been done before. It was unclear just how they would proceed to condemn an existing dam and would they have to condemn the entire project in the process. So because of those complications, they had signed this 1988 agreement, which was called Exhibit Five, and Exhibit Five had contained twenty-two elements of agreement, and in that was the commitment to replace in function and utility all of the structures and lands and features that the water district had before New Waddell Dam came into being.

So the first couple of meetings I attended where the water district and the Phoenix staff were together, it became obvious to me that there was such a strong animosity there, the meetings would break down almost immediately. Harsh words would be spoken. The district would stand firm in their position. Reclamation would stand firm in their position, and then the arguments would break out. It was really a hostile and confrontational arena. So I decided if I was going to get anything organized, straightened out on that and stay on schedule, I had to not allow that kind of situation to occur in the meetings we were having.

So one of the first things I did was take Mr. Falbol aside after a meeting, took him into my office, and I told him, "I don't see anything constructive in that process, and that the meetings are to talk about the issues not to confront each other, and we can agree to disagree in those meeting and I'll control my staff but he's got to control himself and his staff. So we'll be gentlemen in those meetings, and after

the meetings he can take notes and I'll take notes and we'll come into my office and address the issues ourselves rather than beat up on staff members and get into these arguments in front of staff and out in the open."

So he agreed to do that, and that's the process we started using, and it worked pretty well. We didn't agree all the time. We exchanged some very pointed letters several times. But over the first four or five months that I was here, I got here in May of '91, and in November of 1991, we reached agreement through a supplemental agreement to the 1988 agreement that was signed with Maricopa Water District, a more definitive agreement that we dubbed in November of '91 Supplement to the '88 Agreement, and that went into great detail to define exactly what was intended by the twenty-two elements of Exhibit Five.

We made some tradeoffs, but we defined exactly what we were going to build for Maricopa Water District. From that point we started moving forward with construction of their facilities. They proceeded with the permit application, got the permit and things got on a much more even keel. The consequence of all that was we did stay on schedule and the New Waddell Dam was completed on schedule and generated power in the first year it was supposed to, none of which might have occurred otherwise.

I guess the other thing that broke out, and it was more in the political arena, that occupied quite a bit of my time, in the process of nurturing my relationships, or Reclamation's relationship with Maricopa Water District, I had not paid sufficient attention to our other client or partner at Lake Pleasant, which was Maricopa County. In the process of becoming if not friends with Maricopa Water District, at least reaching an understanding with the water district, I lost Maricopa County.

Troubles with Maricopa County

In November I can remember I was at the Colorado River Water Users Association meeting and there was a press conference held in Phoenix, Arizona, by the manager of Maricopa County, a guy named Roy Patterson. He had a huge press conference and, through the media, said that Maricopa County was going to pull out of Lake Pleasant, said that the Bureau was double-dealing, two-faced lying, essentially bastardy, that we had given away the show to Maricopa Water District and there was no way they could now retain their position as recreation manager of Lake Pleasant.

Again, in the overall scope of the Central Arizona Project, this was a minor

incident, but on the political scene, it was one that drew attention from Washington, D.C., all the way back to Phoenix. Maricopa County was an important component of how this thing had been crafted. So now my job is to remarry Maricopa County back with Reclamation and try to deal with the animosity between the county and Maricopa Water District, which was every bit as deep and divisive, if not more so, than the relationship that Reclamation had with the water district. And relation between Reclamation and the county wasn't all that great, but it was halfway decent before I came on the scene, I guess.

After December of '91, now my job was to try and get the county settled down and back in the fold, so for the next year a lot of my time was occupied with the chairman of the board of supervisors for Maricopa County, Betsy Bayless [phonetic], and working with Maricopa Water District through Joe Falbol and then some staff people and attorneys on every side, trying to work out a relationship and operating agreement, Three-Party Agreement is what we started to call it at first, of how the county would manage the park that had to accommodate Maricopa Water District having recreational access to the lake and being able to charge fees for certain services on their portion of the land, but also there was a financial relationship that had to be established between the water district and the county so that the people using the lake from the water district lands would pay their fair share of the management of Lake Pleasant.

So for a year we met and we talked and we wrestled and we talked about subjects as ridiculous as what's access to surface of the lake mean. Does that mean that Maricopa Water District can set up a concessionaire that runs submarines under the lake, or do they not get to do that. Amongst many other ridiculous discussions we had, we finally crafted by, I guess, September of '92, a three-party agreement that was coming together in draft form reasonably well. The county had hired an attorney to head up their side of this team.

In–let me see, am I getting my years right here? Yeah, this was '92. '92 was the election year, wasn't it? Yeah. That's when Dennis Underwood came through Phoenix, and Dennis was very interested in getting a political plum on the Republican side, so he came into Phoenix, Arizona, and was interested in signing this Three-Party Agreement between the county, the Bureau of Reclamation and the Maricopa Water District. So we had several frantic sessions with the county attorney's office and with the Solicitor's Office, with Reclamation, and there were a couple of fine points that the Solicitor's Office was questioning and the county attorneys were unwilling to sign as long as we had this difficulty, and Dennis was trying to get the county to back off of their position and get the Field Solicitor's

Office to compromise a bit on their position. This was in early November.

And lo and behold, Dennis was here a day and a half and we reached a final compromise and did, in fact, get a final agreement in place that was then sent back to Washington D.C. The political splash was made. It didn't change the course of the election for George Bush, but it did get the agreement back in Washington in December, and Dennis Underwood signed it, I think on the sixth of December.

So now we've got the county back in the fold. We've got the water district settled down, and essentially that was a lot of what occupied the first two years I was down there.

Storey: What's been going on since?

Progress on the Central Arizona Project

Schroeder: Well, let me see. Since some time occupied in implementing the Three-Party Agreement, what we wrote down and then how it was implemented were two different things. We thought we had a pretty good understanding. It's amazing how implementation of agreement becomes as onerous and difficult as it was in negotiating the agreement in the first place. That has occupied a lot of time.

Once the county was back in the position of managing the lake, we had to redefine the budget for the county replacement items in terms of recreation facilities at the lake. By this time, Maricopa Water District was well into construction of their facilities, and we found out that the clarification attempt with the November '91 Supplement to the '88 Agreement with the water district still was not as crystal clear as we needed it in working with Mr. Falbol. So working on two tracks mostly associated with Lake Pleasant again, we were trying to get facilities under way for the county and trying to figure out how to complete certain facilities for the water district.

The issue became one where the water district was demanding far more that we felt we should build and owed them. Then if, in fact, they want to build enhancement of those facilities, how do we deal with determining who pays what share of the enhancement? They would pay 100 percent of the enhancement, but how do you integrate enhancement of a building with the replacement when some of its faucets and door knobs and other things that they just wanted better quality of? It was difficult to figure that out.

So the water district proposed that we simply buy them out and let them build their own facilities, and I agreed with that concept, but to do that we had to figure out what we would have built for them, how much that would have cost, and then reach agreement on whether they agreed with our analysis. So we spent a lot of time in '93 going through that exercise. We did it, we completed it. We got the agreement from the Solicitor's Office that that was probably the smartest–

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BEGIN SIDE 1, TAPE 2. MAY 24, 1996.

Storey: This is tape two of an interview by Brit Storey with Dennis Schroeder on May the 24th, 1996.

Schroeder: A lot of negotiation.

Storey: And many meetings.

Schroeder: And many meetings. We reached an agreement on a value of what Reclamation would have spent had they designed and constructed the facilities for the water district, and we bought them out. We essentially issued a check and told them, "Here's the money for your facilities for these items in Exhibit Five, and now it's your responsibility to go build your facilities," which they have done.

Storey: These were replacement facilities?

Schroeder: These were replacement in function and utility, which is an interesting twist on the normal Reclamation replacement in kind. What the district got into the process by saying function and utility, there were several things that entered into that process. They recognized that the new lake was going to go up and down 150 feet potentially.

For example, their old boat ramp was probably only a hundred or two hundred feet long at the most. It was not very wide, but it did reach all levels of the fluctuating reservoir as they knew it at that time, or for the most part.

Storey: On the original Waddell Dam.

Schroeder: On the original Waddell Dam. Our replacement in function and utility meant that we had to build a boat ramp that would be in the water throughout 150 feet of fluctuation. Now, if you take a 12 percent boat ramp and go 150 feet vertical,

you've got a 1,500- to 1,800-foot long boat ramp, and that's what function and utility meant, that the utility had to be the same as it was with the old lake on the new lake.

They also had a sloped lands issue where in the Exhibit Five said they had to have gently sloping lands to the lake associated with their new parcel of land that was negotiated, the 225-acre parcel. Well, what did that mean? The new reservoir and the location where those lands were located, the hillsides which went down toward the lake, the new lake, were anything but gently sloping. It depends on your definition of gently sloping, but some of them dropped off vertical for eight or ten or fifteen feet and then sloped at a 60- to 45-degree angle down, and if you took that at face value, we would have had to restructure a fairly significant portion of the stream bank around the lake, and that, of course, was the interpretation that the water district was laying on us.

Our engineers were saying, no, elevating 850 feet of slopped lands and unfortunately it had not been defined in the agreement that we had. It simply said we had to make the lands associated with the new land area gently sloping. Well, in the process of negotiating [this?] us out, we did some trading, horse trading, so to speak. We traded a wider boat ramp and a boat ramp dock guide for these gently sloping lands, and that was the process that we went through with the water district.

I've forgotten the original question. Where were we?

Storey: You said the first couple of years were spent on this, and I said, "What happened next?"

Schroeder: Anyhow, wrestling with the issues of the water district were not over with the November supplement, and wrestling with the county on their issues was not over with the signing of the Three-party Agreement. A lot of the time since then has been in the implementation. I think over a three-year period now, we're pretty well settled into a pattern of operation up there.

Construction of the county facilities has gone well since 1993. It took about a year to get back into the construction process because all the designs were put on the shelf and they all had to be brought off the shelf. Working with the county occupies more time than it should simply because the county, I think, doesn't really have a good handle on what they need to be doing at Lake Pleasant, and in the process of not understanding what should have been built up there, they had sugar plums in their eyes.

As a consequence, we constructed some facilities that are fancy and expensive, but they don't do a service for the public. They simply accommodate the staff at the lake. We're now in the construction of the campgrounds, but it's been the last thing on the list. The county built an operations center first, built a maintenance center second, building an outdoor education center third, and mixed in there, in 3A and B, has been a couple of campgrounds and some picnic areas and other things. We did get in two major boat ramps on the county side in that process.

Other CAP Issues

I guess the other area that has come up in '94-'95 time frame has been the Indian water issues and trying to figure what the Indian component is: the Indian Distribution Division, what it is and what it should be, to get that portion of the project under way. We've concentrated on that the last couple of years. That started to occupy more of my time now with the initiation of self-governance and trying to figure out what that means, and negotiate self-governance agreements with the Gila River Indians and deal with the other Indian tribes on their water problems and water issues, has now become the occupier of my time in large part, and dealing with issues down in Tucson, terminal storage and other issues associated with the political scene that we find ourselves in, in Tucson.

I guess the other thing is in '95 the negotiations with the district broke down in trying to figure out how repayment would come to pass, and so we find ourselves locked in a controversial lawsuit with the Central Arizona Water Conservancy District. The thing that has really gone the smoothest on the project has been the construction. Over the period of time I'm talking about that we've managed to get ourselves snarled into politics and controversy with the Maricopa Water District, Maricopa County, the Indians, and the Central Arizona Water Conservancy District, we have managed to complete New Waddell Dam, which occurred in 1993, and it came on line and has functioned tremendously coming right out of the chute.

We rehabilitated Horseshoe Dam, start to finish, since I've been here, completed that project. We've rehabilitated and raised Bartlett Dam, and that's now complete. That was started in '94 and finished in '96, or '93 to '95, I guess, we just finished it. No, '96, we finished it this year.

We've completed the restoration and raising of Roosevelt Dam–wow, I've got to go. [Tape recorder turned off]

We raised Roosevelt Dam seventy-seven feet and built new spillways.

We've constructed some $30 to $35 million in recreation facilities at Roosevelt Lake for the Forest Service. Actually we funded them. The Forest Service has done an awful lot of the work.

Let me see. Coolidge Dam. I forgot to mention Coolidge Dam for B-I-A, [Bureau of Indian Affairs] we initiated construction on that in, I think, '92 and completed construction in '95. That was a major restoration of one the most dangerous dams in the United States.

So there's been a lot of activity, and in the process of completing all of this work, obviously as the work has come off line we've had to deal with re-invention of government, re-invention of government II, total quality management concepts, team work, downsizing, right sizing. You name it, organizationally we've had to deal with that. Since 1993, when we had a staff of 640 to 650 people, we have now, through the buyout process and through attrition and through frozen hiring practices, come down to a staff of, we're approaching 300 at this point in time and are continuing our downsizing process.

So there's been a lot of activity. It hasn't all been a bed of roses. We have accomplished an awful lot on the construction side. On the organization side it's been in turmoil for the last three years, and we're embroiled in the legal battles not only with the district over repayment, but with Kiewit. I guess the other major component of construction were replacement of the siphons. We replaced the New River siphon, twenty-one-foot-diameter siphons that cross New River and the Aqua Fria River and Salt River were determined to be not capable of staying in service. There's always a potential for a rupture. So we started replacement process and replaced Salt River and New River in the time frame '92 to '95. So we completed that.

We also completed the rest of the rehabilitation of the Reach Eleven dikes, which is fourteen miles of dikes out here in North Scottsdale and along the northern boundary of Phoenix, and spent $32 million in that process. So over the years, when I got here our budget was in the $260 to $280 million range and now we're looking at, let me see, '96, I think we're still around $150 million. But out of that $150 million, a major portion of it is pass-through money through self-governance and with Navajo Power Plant. So the whole thing has changed. Our budget is dramatically down. Our staffing is dramatically down, and overall, I think we've done a pretty good job of addressing all that, but it's been complicated and at times frustrating.

Storey: I can imagine. And here we are.

Schroeder: Here we are.

Moving Up Through the Federal Government

Storey: Tell me about your grades over the years. I think you talked about that until you moved to the Inspector's Office in Omaha.

Schroeder: My grades. Let me see, well, I started out as a GS-9. That's what you're talking about?

Storey: Yes, that's what I'm talking about.

Schroeder: I started out as a GS-9 in the spring of '68 and went to GS-11 after I got off rotation in June of '69, I guess, through old Clarence Swanson. Stayed a GS-11 until I went to Billings, Montana, in 1972. I was a GS-11 in Billings for a year and then in 1973 got–I think it was '73, yeah, it had to have been, got my GS-12 from Jim Rawlings in the Irrigation Operations Branch.

Then I went to Alaska as a GS-12, took a lateral to a 12/13 position, became a 13 in Alaska after a year up there. So let me see, that's 1975, so I got a GS-13 in '75. Came back to Billings as a GS-13 and spent four years working for Jim Rawlings as a GS-13, and the last six months I was the acting supervisor of Water and Land and got a temporary promotion to a 14.

Got an offer from the Federal Inspector's Office to head up the Omaha office in a 14/15 position in Omaha in 1980, August of 1980. So I got a permanent 14 position in 1980. Then in 1981 they promoted me to the GS-15 position. I held that until March of '83, when I moved to Billings, Montana, and the project manager was a 15, and as his assistant I was a 14, so I went back down to a 14/step 10. So that was the down grade I'd taken. I Thought it was supposed to be a traumatic experience; I didn't even notice it really, because the salary didn't change. What I did lose was the automatic increases that occur. I locked in the step 10 position. I was locked in at that salary.

So for four years I sat at the 14/step 10 and then the job in Denver came up, the deputy assistant commission for engineering and research, which was an S-E-S position. You had to have a year of GS-15 to apply for that position, and I had gotten that in the Omaha position with the Federal Inspector's Office, so I qualified

for the S-E-S. So in April of '87, I got an S-E-S position in Denver and have held the S-E-S position. I started out as an S-E-S-1 and have gradually worked up to the S-E-S-4. I jumped two notches while I was in Denver, and then when I moved to Phoenix I was still an S-E-S-3, but then Bob Towles got me up to the S-E-S-4 in probably '92 or '93, and that's where I've been since that point.

Storey: What kind of training did you have to go through for the S-E-S position?

Schroeder: Well, essentially my qualifications for S-E-S came about through my moving in and out of Reclamation. There was a requirement for S-E-S that you either had to have training, you had to have multi-agency background, and I guess the multi-agency came about through my movement with the Federal Inspector's Office and the Alaska Pipeline Office, which I hadn't realize that that would be that kind of a benefit at the time, but that's what really made me eligible without having gone through a S-E-S program of some sort to move into an S-E-S position.

I did have to go through forty hours or several weeks of training. I spent three weeks back in Charlottesville, North Carolina, in one session and several other times I went back to D.C., I think, and spent two weeks on a training session, but I did not go through the departmental S-E-S training program to get the S-E-S position. But certainly the work with the other agencies, if I hadn't had that, I would never have qualified for the S-E-S, I don't think.

Storey: What kind of time do we have now?

Schroeder: I should wrap up. What time is it?

Storey: Two-thirty.

Schroeder: Oh, hell, I thought it was 4:30. Okay. We've got plenty of time.

Storey: Oh, okay.

Schroeder: I'm sorry.

Preference for Civil Engineering

Storey: Let's go back to the beginning, and I've got a few questions, I think. When you went to Denver and were working in the Concrete Dam Section, going through your rotation and so on, and finally ended up in the structural group doing bridges and so

on, what kind of training did you have? Why did you go there than, say, the Concrete Dam Section?

Schroeder: Well, I was trained as a civil engineer first and then I went on and got a master's degree in structural engineering, and structural analysis was really, in the engineering field, my first love and probably my strongest suit. I had taken hydraulics in college, of course. It was a prerequisite. But I hadn't gone into any significant lengths to become a hydraulic engineer by any means. So designing canals and pipelines really wasn't my forte. Bridges and buildings and structural steel was where I kind of enjoyed myself. It certainly wasn't in calculating monstrous differential equations or summation equations in the trial load analysis arena that the concrete dams group was working with at that point in time.

I didn't fancy myself as a wizard at math to get into the–oh God, what was the kinds of things that Howard Boggs and Louie Ream [phonetic] were involved in at the time? That was the stress analysis on the dams. It was extremely tedious to me and terribly boring trying to look at all the finite element analyses and points of stress and strain and so on. That just wasn't my cup of tea. Steel beams and bridges and that kind of thing were easier to deal with; reinforced concrete design, too.

One of my first things was the water tank on the Southern Nevada Project and that was interesting. I just had not interest in designing a dam, per se. It seemed like a terribly boring process to me.

Storey: You designed a couple of bridges or worked on the design of a couple of bridges?

Schroeder: Yeah.

Storey: What was the process? Were you the only person working on those bridges?

Schroeder: No, at that time Roy Lindhardt, I couldn't think of his name before, but Roy Lindhardt was kind of the bridge guru in the structural analysis group and bridges. He was the one in the bridge side of the bridges, pipelines, and canals. So he taught me how to approach bridge design, and you had to deal with the abutments and figure out the pile strengths and pile depths and the friction resistance on the ground, and figure out how to configure the abutments.

Then, as I recall, yeah, this was a three-span bridge, it had a couple of piers out in the middle of the stream. I had to figure out, you know, what to do with the piers, design a pier that would withstand floods and ice loads and earthquakes and

all that good stuff, and then you slap a fully loaded train on top of it and rattle and bang on that a bit and see how all the stresses come out of that. Then wind loads on the train, and you've got to put the piles in at certain angles to resist the impact load as the train hits the bridge, and the live load, the dead load, the dynamic load, and the other things all have to be figured into it.

In college they teach you how to calculate that from a couple sentences of a problem that you get in class, but it doesn't equate to getting the bear numbers from the drillers and the data that they've collected out in the field and then they ship you in drill logs and the composition of the soil, and then from that you have to start forward with the design. You get it in bits and pieces in college, but then you have to apply the whole thing when you're actually doing the design process.

So Roy, when we decided the railroad bridge, kind of brought that in to focus and gave me a lot of insight on how to approach a design, and then you had the grunt work at the end of the process where the fun is in calculating out the beams and girders in designing the piles, but then you've got to draw all this up and put it in a form that you can give to the contractors and the field staff and they can understand what the hell they're supposed to build clearly and without having errors and mistakes on your sheets, have got to be laid out in detail and accurately so as not to cause confusion.

Storey: Which bridges were these, do you remember?

Schroeder: You know, I was trying to think. Oh God, the railroad bridge, I'm not sure whether that was tied in with the Garrison Project, I really don't remember. We did a prestressed concrete girder bridge, this was the second one. Max Stodolski and I worked on one. It was a project up in Oregon and the name started with an "S," but I tell you it just doesn't come back to me right now.

Storey: How long would it take?

Schroeder: Designing a bridge?

Storey: Yes, say, designing the railroad bridge.

Bridge Designing

Schroeder: Oh, probably three to four months of fairly steady work. There was other activities mixed in along the way. But it was not a quick and dirty thing. I was surprised

when I actually got into detail designs. Your calculations, you have to proceed through the calculations. You've got to make sure they're accurate.

At that time we had to go to the card machine. The old computer process was to go do your punch cards and then you'd go feed the punch cards to the mail carrier, who would take them over to the computer room and they would run your computer program. If you were lucky, it spit out answers. If you weren't, it came back and you had errors in your programs and you had to recycle that.

Then the drawing process would take probably three to four to maybe a week on each drawing to get those well defined and cut your sections and figure out what your sections showed and accurately delineate that on your drawings. Then you always had the check process. I would complete my designs and give them to Roy Lindhardt or Max to check. If they found any errors, they would come back and I'd have to figure out where the error was. And Roy would do the same thing. He would be working on different things and he would bring them to me to have me check his calculations, so there was a check-and-balance process. And then just getting all the drawings together and getting them into the specification preparation process was always there. So it took a long time, longer than I would've anticipated just coming out of college.

Storey: Would you have been the only person designing the bridge?

Schroeder: Well, there was usually two of us. I was the subordinate engineer, the journeyman, I guess, that would start the process and get things organized and into a fashion that then could be reviewed by the senior engineer which was, in my case, Roy Lindhardt, Max Stodolski and Walt Long, all oversaw the work that I was doing at some point in time during the period I was in Denver.

Storey: But were they actually designing on the same bridge with you?

Schroeder: They were designing. They were either designing other things themselves or overseeing two or three different designs being done by the GS-11 engineers. Usually they would get me started on a design, telling me what was needed and providing me with the information package that I needed to get started, and then they'd leave me alone for a while until I started coming together with some products that they could then check.

END SIDE 1, TAPE 2. MAY 24, 1996.
BEGIN SIDE 2, TAPE 2. MAY 24, 1996.

Schroeder: The other person I worked quite a bit with was Ray Thibault on some prestressed bridge designs. There again, Ray was the checker and I was the starter. Ray was an interesting guy to deal with, because if we didn't come right out on a gnat's ass to the fifteenth decimal point on the same number, why, we would have to meticulously go back through and figure out why we weren't coming out at the same place. He was a good design engineer, but sometimes I thought he stretched it a bit far when you're designing a prestressed beam based upon a lot of empirical data, not theoretical, but empirical formulas and stuff didn't concern me that if you got out past the second decimal point you had a little difference in your calculation, it didn't seem to make a whole lot of difference to me. But it was interesting, and I enjoyed my time in design group.

Storey: We're talking concrete bridges?

Schroeder: Yeah.

Storey: That are stressed. Now, when you say prestressed, this means something they cart in and put in place?

Schroeder: Well, you've got prestressed and then you've got post tension. Prestressed girder is–they normally build them in the yard, an assembly plant, and they stretch the girder–I mean they stretch the wire through a–oh God, well, they stretch the tendons to a preset amount. They are usually three-eighths to half-inch tendons, and if I remember right, they stress out to 130,000 psi or some such thing. So you stretch the tendon like a rubber band, and then you pour the concrete around that tendon and you have to design in the beam whether the tendons are straight or whether they arch up at the end, and the number of tendons and the location that they're at in the beam all defines how much load that beam will hold.

When the concrete hardens, you release the tendons and they snap back together, and since they can't go all the way back together, because now you've got them solidly encased in concrete, they compress the beam. So now you've got the concrete in compression. That's the prestressing theory, and it tends to bow the concrete beam upward, so you get a camber on a prestressed concrete beam, and you design that camber into it. Usually that camber is an inch to two inches, but then when you set that beam out in the field on the abutments, the dead load tends to take a lot of that camber out and then the live load or the deck, if you've designed it right, the beam will come back down to almost zero camber under the dead load, and then the live load as it goes across, is designed to flex a bit. But anyhow, that's the pretension concrete girders.

The post tension then are the situation where you pour the concrete in the field, with field form work, but with channels designed into it and then you stretch the cables in the field after the concrete has hardened. The concrete does not encase the cable at that point in time until after it's stretched. Then once its stretched, then they feed grout into the conduit system and allow the grout to harden as a part of the process, and usually have anchors on each end which keeps that cable and tension, and that's a post tension girder.

Storey: That's interesting. You also designed transmission lines, is that right?

Schroeder: No, I never designed transmission line, I just made the mistake of critiquing the transmission towers when I was a rotation engineer. No, I never did get into design of transmission line per se.

I got into a bridge design for the feasibility design at the Coulee, Grand Coulee Power Plant, when I was in the Transmission and Structural Steel Section. I don't think it was Transmission and Structural Steel Group at that time.

Storey: What was it you did at Grand Coulee? Was that part of your rotation?

Schroeder: At Grand Coulee I was just on a field assignment, at construction of the forebay, and then I worked with Jack Tyler up on the inspection of the administration building. It was only a three-month field assignment to get involved in field construction activities.

Storey: Even though you were in the Canal, Bridge and Pipeline Section, you didn't do much with canals and with pipelines?

Schroeder: No, I really didn't get involved in the hydraulic design aspects. Again, that wasn't really an area that I was all that interested in and it really wasn't my strong suit.

Storey: Tell me more about the Southern Nevada Water Project and the prestressed water storage tanks that you worked on.

Southern Nevada Water Project

Schroeder: Well, let me see, that was with Walt Long. There's not too much to tell there. It was a thin-walled prestressed concrete vessel. If I remember right, it was about 120 feet in diameter, a fairly good-size tank. But it involved some hydraulics in terms of the inlet and outlet features. The main thing was the design of the column systems

for the roof, which was a concrete roof, and the design of the prestressed wrapping that was essentially like wrapping a pipe, similar to it, a mighty big pipe, 146 or a 140-foot-diameter pipe.

The prestressing wire is wrapped around the outside of the tank after the concrete wall is poured, and it's wrapped to a certain tension again, and the number of wraps is varied as you go up the side wall of the tank. You've got a lot of wrapping around the bottom, and then as you go up, of course the water gets less, so your pressures get less, and so you go from maybe three- and four-wrap thickness on the bottom to a couple of wraps, and then down to single wrapping as you approach the top of the tank. Just a lot of design calculations, a lot of drawings associated with one.

I guess the interesting part, there were certain pamphlets and so on defining the procedures and techniques to use in the design of those tanks, and that's basically what we used.

Storey: Did you come out in the field during that design process?

Schroeder: No. Other than the rotation assignment and going to San Diego the one time on the research vessel, those were the only times I got to go out to the field. No, I never saw a bridge I designed, and the only time I've seen the water tanks, I don't now which one is mine, but I see similar tanks down when I go to Boulder City. No, they didn't normally let the younger design engineers out of the office. Some of the old design engineers who had never gotten passed the journeyman level, in other words, they spent their whole careers as GS-11 engineers, had never seen a field project and field construction ongoing.

Storey: Really.

Schroeder: Yeah.

Storey: It isn't necessary to see the site in order to design?

Schroeder: It's not necessary. I think it's extremely helpful, particularly when you've got problems with the design. If the designer doesn't get to go out and see what the field construction people have to face, you don't really know what your mistakes were. If you sent them out a snake nest of reinforcing steel and connections that there's no way in hell they can deal with out in the field, chances are the next time you do a design you're going to do the same thing and they'll have to do their same

thing out in the field.

Storey: Which would be?

Schroeder: Well, which would be do the design just like you did it the other time. So they get the same product out in the field, looks the same. So they either have to deal with it. It's a difficult thing to deal with, or if they have made corrections in the field that they then have to repeat the process over again.

No, I think the Bureau, and it's partly the fault of the regions and partly the fault of Denver, I suppose, but the Bureau did not pay enough attention to that over the years to get the design people out and associated with the construction people, the construction problems, if nothing more than just get a familiarity with what these things really look like out there and what things the field has to put up with that you have laid down in black in white, then they're expected to build with no problems. You just hand it to them and say, "Here it is. Go do it." Its not that easy most of the time. Its gotten better, by the way, in the last ten years, probably. The Bureau has done a much better job of getting the staff people out of Denver out to work with the field and address the problems.

Storey: The next thing I have in my notes is your work for the San Diego Power and Electric vessel.

San Diego Power and Electric

Schroeder: Oh, yeah.

Storey: What is this vessel?

Schroeder: Well, it was a rectangular tank, simply a box, if I remember right. It was about twelve feet high and maybe eighteen or so feet long and about eight feet wide. It set up on some pedestals. I wasn't involved with the design of it, I was simply doing an analysis of heat flow through the tank. It was designed to accept extremely hot water. I'm not sure whether the intent was to build a much bigger–this was simply a model, and I guess they were thinking about the prospect of building bigger and bigger tanks or whether this was associated with the desalination process, it never was clear, or else I don't remember it.

But what they wanted to know was how the temperature differential between the hot water inside the tank, super heated water inside the tank, would affect the

tank if the outside air temperature was whatever it was, the ambient air temperature. So I would model the process of having extremely hot temperature on the inside of the tank and then determine how that heat flowed through the tank and what happened in terms of stresses and strains in the tank wall, determine if it went into tension, and if so, how much tension and if it was developing a crack in the tank which would cause leakage or not. It was a lot of theoretical stuff, and I'm not sure what the application ever came to be. I worked on it for a couple of years and it was just one of those things in research I did the analysis, but I don't know whatever happened to it or what the results ever were.

Storey: When you say you modeled it, were you out there measuring temperature and things or was this strictly an intellectual process?

Schroeder: Well, it was strictly theoretical and computer process for the most part. We did go out to visit the vessel a couple of times. If I remember right, we had the strain gauges on the tank. I'm trying to remember if we ever ran the hot water through the tank to see if the strain gauges reacted. I know Jim Graham and I went back to D.C. one time. I think I went to San Diego once, for sure, because I missed the plane in Phoenix and they had to wait for me to come running out to catch the plane. I think I was out to the vessel twice. To tell you the truth its been twenty-five years ago, and I just don't remember that much about what we measured and how the results turned out.

Storey: Was this about the time that you decided you liked the research rather than the design work, is that what I have in my notes?

Schroeder: (laughter) Let me see. No, I don't remember saying I like research better than design. That's about the time that I decided that I thought that design might be a little tedious for me, especially when you throw in the drafting and everything to get it off your desk. That's when I went into the irrigation operation, went over to the O&M side of the organization as opposed to design, which was '72.

Storey: When you moved to Billings?

Schroeder: When I moved to Billings.

Storey: Good. Well, our time is up now. I'd like to ask whether your willing for the information on these tapes and the resulting transcripts to be used by researchers.

Schroeder: Yeah.

Storey: Good. Thank you very much.

END SIDE 2, TAPE 2. MAY 24, 1996.
BEGIN SIDE 1, TAPE 1. JUNE 21, 1996.

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation, interviewing Dennis E. Schroeder, the area manager of the Phoenix Area Office, in the Phoenix Area Office on June the 21st, 1996, at about one o'clock in the afternoon. This is tape one.

Let's see, I think last time we pretty much talked briefly about C-A-P work. I'm wondering how you were assigned work when you were working for the assistant commissioner for engineering and research. Did you two split up responsibilities or was everybody working on everything? How did that work?

Working for the Assistant Commissioner for Engineering and Research

Schroeder: Well, Darrell was more into the professional society, political arena, dealing with the R-Ds, dealing with Lloyd Dusha [phonetic] from the Corps of Engineers, fairly high-level external things. Darrell was not into the technical aspects of the E&R Center work and pretty much left that, and advised me to leave that down in the bowels of the organization or at the division level, in particular.

But as we worked for a while together, it didn't take me long to figure out, I think, how to deal or work with Darrell best, and that was to intercept and serve as the conduit for everything that went through the office and anything and everything I could sign or anything and everything I could deal with, I dealt with. Even some of the division chiefs learned that Darrell was not one to not react if he was informed that there was a problem. He wanted to deal with it immediately. And sometimes Darrell's bedside manner in dealing with issues and problems wasn't what the staff wanted because he would take off and, like a bulldog, head straight for the jugular, wherever he thought the problem might be.

So after probably four to six months, the division chiefs figured out that I wasn't there to impede or hinder their situation at all, and I probably took a little bit slower approach to try and deal with some of the internal issues than maybe Darrell did, and usually it was more, I don't know, what should I say, more of a slow approach to try and figure out how in the heck to deal with some of this stuff. So over a period of time, six months to a year, we fit in very well to a cycle where I dealt with everything internal and some of the external, not a whole lot, and Darrell

dealt with external issues and the higher-level things. So the day-to-day operation of the E&R Center was pretty much left to me. That's just the way it broke out. I was content with that, and I think Darrell was happy with that also.

Even to the extent of performance evaluations on the division chiefs, I would always fill out the preliminary material and provide that to Darrell so that he could then do the evaluations. But basically the information was fed from me up to Darrell, and it seemed to work well.

Storey: I think we've talked about grades and how you progressed through the grade structure in the federal government. If I'm recalling, you were a 15 as the head of the office for the natural gas pipeline, is that right?

Schroeder: Yeah, that's correct.

Storey: Then you came to Bismarck and went down?

Schroeder: Yes.

Storey: To a fourteen?

Schroeder: Fourteen/step ten.

Storey: And then you came to Denver and became S-E-S?

Schroeder: Yes.

Storey: How does the S-E-S system work? Are there steps within it, or what?

Schroeder: There's six steps to the S-E-S system. You start out at one and you can progress up to certain levels in certain positions. Like in the position I'm in now is capped out as an S-E-S 4. S-E-S 5 and 6 is up to the R-D level. So they do put caps on it, depending on where you are in the organization.

Storey: And you had to do special training for that?

Schroeder: No. Actually, I qualified for the S-E-S position because I moved around to other agencies.

Storey: We've already discussed this, I remember now. Okay.

So why did they pick you to come down here, do you think? What was it that they were looking for? And why did they pick Bob–it was Bob Towles before you, wasn't it?

Schroeder: Yeah.

Storey: To come down here, what were they looking for?

Becoming Project Manager of the Central Arizona Project

Schroeder: Oh, I think the–let me see. Ed Hallenbeck had just left the region. I had been in Denver four years. Bob Towles had been down here in Phoenix for five years. He had come in '86, I believe. I think they simply wanted to–according to Dennis Underwood, who was the commissioner at that time, and we chatted about it, he liked me or at least he said he was impressed with the work that was done at the E&R Center, but he wanted to "round out my experience," and felt that getting me into the ebb and flow of a major project office and into the arena of C-A-P and the politics and the hands-on, a chief of a major organization as opposed to the deputy, which as I was in Denver, would give me the flavor of how to deal with things head on, rather than being buffered by somebody that was a notch higher.

So the plan was to send me to Phoenix for three years. This was '91, the election year was '94, and then Darrell anticipated retiring in that period of time, at least that was the plan, and then I would move back to Denver. And having rounded out my learning experience in Phoenix, I would go back to Denver and be the head of the E&R Center as the assistant commissioner for engineering and research. That was the professed plan. I think we've talked about it before. The election of '94–when did [Bill] Clinton come in?

Storey: It would've been the election of '92.

Schroeder: '92. The election of '92 upset the apple cart. I can remember Dennis was down here in November of '92, and we had the Maricopa County situation. We were close to reaching final agreement and getting Maricopa County back in the park up at Lake Pleasant, and Dennis wanted to know at that time–this was in early November. Things were not looking great. Then they lost the election. Dennis talked to me one more time and said, "Do you want to get back to Denver now? We'll get you back up there."

Darrell had left. No, Darrell was still there. But they could've moved me

back up, I think, as a deputy at that point in time. I declined the offer. I had become accustomed to the job here in Phoenix. I told Dennis I would rather close out my career with this project office, finish the construction of C-A-P, than go up to Denver and become the "last chief engineer" or the assistant commissioner for engineering research that had to oversee the dismantling and downsizing of that organization.

With C-A-P we were undergoing the same future, but it was a planned dismantling: completion of construction, you downsize, you drop back, everybody understands what has to happen. In Denver it was a different thing. It would be downsizing an organization that thought they had a future, and as it turned out, probably didn't have as great a future as they anticipated. So I declined the offer and essentially settled into Phoenix for the duration. So I've been here five years now, and its been interesting and challenging, but at least as we downsize here, we've done it in a systematic fashion and have maintained, I think, the morale of the troops better than might have been otherwise the case and we're progressing toward what everybody knows to be the ultimate end, and that is to become a fairly small area office in Phoenix over the next probably ten to twenty years.

Storey: I take it you like construction.

Schroeder: I enjoy construction. My expertise in construction is not particularly as a construction engineer, but into the nitty-gritty of the day-to-day stuff. But I do enjoy overseeing the construction of things and working at a higher level so that you can deal with the issues as they come up and make decisions that have to be made, not the little ones, but the major ones. Like, you know, I guess I would go back on the pipeline and think about all the things that we did there. We had to dictate exactly where the contract could go, when it could go there, what it could do, add in on some instances, realign the road and realign the pipeline just by going into the field and flying over in a helicopter and picking the best site and just saying, "Lets go there instead of there. It looks better." It's not into the nuts and bolts of engineering and making drawings and everything. That's left to somebody else. It's kind of, you know, the easy route. You make decision from on high and then watch them develop and come to completion. It is satisfying.

Storey: Well, that was my next question. How has it changed, moving from a construction inspector to the head of a pipeline office, to the head of Reclamation's largest-ever construction project, in terms of money at least?

Schroeder: In terms of money?

Storey: Isn't this the most costly project, the most money Reclamation's ever spent on a project?

Managing a Large-Scale Project

Schroeder: Yeah. Yeah. From that perspective, on the Trans Alaska Pipeline, as the authorized officer's field representative, we simply had the power to direct the oil companies on what they could and couldn't do and in most instances also affected the contractors and what they were doing. So it was an oversight position, but we had a lot of authority and a lot of power. That transitioned, again, to the gas pipeline, when I was head of the Omaha office, I wasn't in the field, but I had direct control over the field staff, and they would bring their problems back to Omaha, or we would fly out to the field and deal with them. So, again, I was always working from a higher level than in the trenches with the troops. So here at C-A-P, again, it's kind of working from a higher position and decision-making position than being down at the working level.

Each project, its kind of ironic, I guess, but in terms of construction, I worked on probably three of the biggest projects ever undertaken in the United States, each during their course. The Trans Alaska Pipeline was a billion dollars, and that was a lot of money back in '72, '73. The Alaska natural gas pipeline was a $44 billion project, if it had gone to completion. The pipeline lower legs were the cheap part. But the Alaskan portion which would've come out of Prudhoe Bay and down through Canada, our cost estimates were up in the $40 billion range.

Then I come to C-A-P, and this is pushing the $4 billion mark now, which is the biggest project Reclamation's ever built. So from that standpoint, it's always been high dollar amounts that have involved my construction activity.

Storey: The nature of what you did, though, hasn't that changed substantially because of having to deal with the water users and so on and the various municipalities, or has that changed in nature?

Schroeder: I don't think it's changed all that much. The relationships have varied. I think the power structure had changed a bit. On the pipelines, the oil companies knew that they had to come to the feds to accomplish what they wanted to accomplish. Our directive was to get the damn thing built. That was the highest priority project in the country in the early seventies, which was when the oil shortages were starting to become apparent, and they wanted that pipeline complete. So we needed to balance the environmental interests against getting the job done, and that was the role of the

Alaska Pipeline Office, get the damn thing built, but do it right.

With the gas companies it was pretty much the same. As a matter of fact, on paper we had more power than even the Alaska Pipeline Office had, because we had authority over the federal agencies, also. But it was pretty much the same. We were always dealing with the various entities. The oil companies had certain interests and they wanted to do certain things. They had to come to us for permission and they'd lay out what they wanted to do and how they were going to do it, and we would approve it and then oversight it. The gas companies had to do the same thing.

The Changing Role of Reclamation

With C-A-P it's a little bit different, but only in the–I guess the thing that changes, you don't have the power that we had previously. With the changing role of Reclamation, the respect of the authority of the Bureau just wasn't there. Then as a matter of fact, as I got into some of the activities down here with Maricopa County and the conservancy district, particular to the Central Arizona Conservancy District, I can remember the first couple weeks I was here, I was invited in to a board meeting to introduce myself to the board, and there was a couple of ex-governors and various other high-powered people on the board, and I forget the president's name at that time, Jack something, wore an eye patch and was an ex-governor. It became obvious to me about thirty seconds into my little speech saying, "I'm Dennis Schroeder and I'm here from Bismarck," or from Denver, and I thought Jack was going to go to sleep on me. I thought, "What the hell. I don't need this. If they're not interested in my background and what I'm here to do, I'm not too interested in standing up here trying to justify it." So I wrapped up in probably a minute and a half and got the hell out of there. Which was totally different, by the way, from the Bismarck, North Dakota, the Garrison Conservancy District. They were all farm types, some of them with political backgrounds, but nothing near the power of the Arizona group. They had a lot of respect for the Bureau. They had a lot of respect for the project manager and the assistant project manager, and when we spoke at their meetings, they listened and they invited us to every meeting. We attended every meeting.

With C-A-P it's totally different. We attend very few of them. If we do, it's in the audience as spectators. It's a power role, I guess. They want to make sure that the Bureau of Reclamation knows its position and that position is to build the damn project for them and then get the hell out of the way and go about our business. Don't think that we're the power brokers in Arizona, we're simply here

on a mission. They'll accept that while we're here, but beyond that they haven't got a hell of a lot of time for us.

I think that's the way this thing has played out, too. As we've completed the various stages of the project, you don't see a hell of a lot of pats on the back for the Bureau of Reclamation. They're complaining about the price tag and have essentially issued us a notice of eviction from the headquarters site here, which we'll move off of in September of this year.

Most of the relationship with the staff with the district is pretty decent, but there again, you get a lot of second-guessing, and as we approach completion of the construction on various things, they have decided that they'd rather do it than have us finish it out. Presumably to save money, but essentially its not saving money. It just puts them in a position of having control over what's happening.

Storey: But it's a Reclamation-owned project, ultimately. How do we assure quality?

Reclamation's Responsibility toward CAP

Schroeder: Well, we're in an oversight role. The district right now is completing the Aqua Fria siphon, which we have done two siphons previous to that. We assure quality through the fact that they did have enough marks to maintain Denver as the design organization. Denver did the design and is being maintained in a position of engineering contact for the construction activity. Our role here in Phoenix is very limited. We make a site visit maybe once or twice a week to monitor the construction activity. But the one area of comfort, they did hire, when they staffed up to do the construction, they hired every person that they have involved in the construction from our staff that was involved in the construction of the other two siphons. So the experience is there, it just transitioned over from the Reclamation staff to the C District staff.

Storey: One of the things I've heard about in past, when things were transferred, was that the district begins to worry about what Reclamation's going to take away with it or use in the meantime, that kind of thing. Are we running into those kinds of issues?

Schroeder: Nothing very serious, I think. We've tried to accommodate the district and provide to them trailers and testing equipment and all of the things that they needed to do the construction which were within our jurisdiction. And again, that occurred at the staff level. Our intent was to accommodate them, knowing that the decision had been made, that they were going to do the construction, so we decided to, in the

interest of getting the job done as quickly and simply as possible, not to obstruct it any way that would seem bureaucratic. So we've been pretty lenient in terms of providing them all the necessary equipment that they need.

Storey: What about things like office furniture and records and those kinds of issues?

Schroeder: That hasn't been a major issue. They have, I think, pretty much taken care of their own office furniture. They had at some point in time anticipated maybe taking some of the stuff that we had, but I think they've gone away from that somewhat to buying their own new stuff. A lot of the stuff we had in terms of furnishings and equipment and computers and so on is getting a little bit outmoded, probably. And, you know, I think its their preference to move forward with most of the things that they've purchased themselves.

Storey: Because of the economic situation, I gather, and the cost of the project, there have been a lot of problems, if I'm understanding you correctly, about what they should be repaying, what they shouldn't be repaying. Is that's what resulted in the lawsuit that we're engaged in now, that we're embroiled in now, or is that other issues?

CAP Repayment Issues

Schroeder: There's several. There's several things. If you look at the legal documents that have been filed by each party, there are, I guess, probably some twenty to twenty-five different issues associated with this. I think if you boiled it all down into the real meat, the real crux of the situation, in my view, and I'm not expert on the repayment contract like some of these other guys are, but there were certain deficiencies that showed up on the system. I don't think that they were anybody's fault in terms of Reclamation, other than probably we pushed the envelope of technical capability with the siphons and the prestressed twenty-one-foot-diameter pipe in the seventies, when possibly it would've been smarter not to push that far and go with a different type of siphon. So you're looking at a $150 million deficiency in the system.

There's deficiency–a claimed deficiency in the Havasu Pumping Plant with the impellers, vibration, noise. The district has always felt that that's through some flaw or design fault of Reclamation and the suppliers, but the pumps pump. They have performed for, what, ten or eleven years now with no major problems. The siphons were performing with no major problems. It was Reclamation's decision to replace them. Reach Eleven dikes, $30 some million fix that the district felt the dikes were a flood control device and their only obligation was flood control up to

the hundred-year flood, which the dikes were perfectly capable of performing. But the fact is if you get the project flood and the dikes over top, you flood the entire city of Scottsdale and Phoenix if they go out, in terms of a major catastrophic failure.

So you add all those up, there's a couple hundred million dollars associated with deficiencies, engineering deficiencies in view of the district that are being added on to the price tag. The other thing that we probably should've taken more note of as we progressed along and approached the $2 billion level and expenditure and then exceeded that level, the contract calls for a notification and negotiation with the district to reset then the repayment price tag. As we approached $2 billion and then went past it, everybody anticipated that this would be a congenial acceptance by the district of their obligation and it would not be a major issue.

Well, the fact is, they have indicated that they didn't agree to go beyond what the $1.78 or so billion level, and since they didn't agree to it, they're not required to pay it. I think its probably politics in large part on the district refusing to pay that. I mean, I guess the contract very clearly stipulates what each party is going to do, and simply because Reclamation did not specifically request that we enter negotiations, we did notify the district in '93 that we thought it was time to start negotiation because we had gone pass the $2 billion mark in expenditures and there were additional obligations, and that's basically when the proverbial shit hit the fan and things started going sour.

You would think in terms–I always look at things in percentages, and in terms of percentages we're talking about, out of $2 billion we're arguing over $200 million, which is 10 percent of the project. Well, hell, if I can dicker with somebody over 10 percent–

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Schroeder: I don't see that as a situation where I would go into a multi-million dollar lawsuit on both sides, something that's going to take a lot of time, that's caused a lot of disarray, a lot of dissatisfaction, a lot of mud-slinging, and its essentially screwed up the entire ending, if you will, of the project because–I gave a speech one time, somewhere, I don't know, I guess this is one of the things that really dissatisfies me, but I told them I felt a bit like the American troops probably in World War II where when we landed on the beach in France and came in to rescue them from the war, would compare that back to the early sixties or late sixties when the project came

off and they were all there clapping and cheering and waving us on and telling us to build the project and bring water to the central part of the state, and we did that. We performed very well.

Then if you run the comparison a little farther, now I feel like we're back on the beach and they're slinging stones and rocks and telling us to get the hell off their land and get the hell out of their life because we've essentially completed our job and we've got a few areas of disagreement, so now they don't like us anymore and they want us the heck out of there. I passed that along to the audience, a bunch of lawyers, a couple years ago and I'm not sure they appreciated it, but that's exactly how you start to feel. It's taken a lot of satisfaction out of the job, as far as I'm concerned.

Storey: I take it that $2 billion limit was the reimbursable part of the expenditures?

Contract Negotiations with CAWCD

Schroeder: The obligation of C-A-W-C-D had to be staged. At each stage it was renegotiated as how much they would be paying, and what it did was involve them in some of the decisions on what facilities would be built. The estimates for each stage are just that–estimates. Then as you get into construction you anticipate there's going to be some changes in it. But there were certain stages that required re-consultation, renegotiation, amending the repayment contract so that those were taken into account.

For whatever reason, once we hit the $2 billion level, that's when they said time out and, "We're not going to agree go beyond that." As they interpret the contract, I guess they think they've got a solid enough position to follow it through the litigation and perhaps save themselves $150 to $200 million on the price tag, which if you anticipate we're going to spend probably $15 to $20 million fighting this out, maybe it makes sense, I don't know. Its not the way to finish a project, though.

Storey: I sort of have glimmerings that as we have been delivering water, some of their customers have been saying, "We can't afford your water."

Schroeder: That essentially is a problem with the agriculture. There is no question that the municipal industrial supply is affordable and has created the situation where Phoenix has been able to expand its population tremendously in the last ten years and continues to expand, and Tucson the same way, although Tucson is a little bit

different beast in that you've got various elements in Tucson that think expansion is not good and want to control the expansion down there. So if they can control the way the project water goes into Tucson, and again it's a lot of politics down there, but there's simply that element that doesn't think becoming another Phoenix in the southeastern part of Arizona's a smart thing to do. So they're using every weapon they can to make it sound like the water is unacceptable, and so far have been fairly successful in disrupting the delivery of water down there and its costing them a lot of money. But right now they're still in political disarray over how and when they're going to take C-A-P water.

But the farming community, yeah, they've had problems. The agricultural economy went to hell for various reasons in the early nineties, and as it turns out, C-A-P water costs probably twice as much as it does for them to pump the water from the ground. So they have no incentive to get off the ground water. At the present time, the districts essentially are going bankrupt, which was anticipated. Its just come about fifteen, twenty, thirty years before the time that it was expected to happen.

But C-A-P was always anticipated to transition from an agricultural water supply to a municipal industrial supply as Phoenix and Tucson grew, so its not as though the project's in any danger of going bankrupt, because the cities will take as much water as they need and they'll pay for it as they need to, and then when you distribute that out over the community and the community being up to–if you include both Phoenix and Tucson and the surrounding communities, 3 million-plus people, its not even a ripple on their costs in terms of paying sixty or seventy or eighty bucks an acre foot for water.

Storey: Did I hear somewhere that the irrigation districts that have declared bankruptcy have asserted a right to continue to get the water?

Schroeder: Well, they don't want to give up their right to maintain their C-A-P contracts, and I think some of the arrangements with the C-A-W-C-D have involved them giving back a portion of their supply because they want to get out from under the take-or-pay clauses of the contracts. Back in the eighties when they signed their contracts, they signed contracts and gobbled up as much water as they could within those districts, recognizing the water was going to be valuable. But the imposition of a take-or-pay clause made the situation such that whether they took their entire supply or not, they had to pay for the full supply. That's caused a lot of problems, because some of them have probably taken only 40 to 50 percent of their water supply, and yet their contracts call from them to pay for 100 percent of the supply and they

couldn't afford that.

The district accommodated that with some interim contract procedures that subsidized the water and also let them out from under their take-or-pay classification, but in the process of doing that, the district has taken back the excess water supply and can market that supply if they have a market for it. So far there hasn't been a market for it.

But, I don't know, you can look back on all that stuff and some people do and they say, Jesus, how did they screw this up so bad. But when you're crystal-balling from twenty years in the past, trying to look down the road fifteen or twenty years, sometimes you miss a mark, and I think on C-A-P the mark was missed in several areas.

Storey: So our contract is with C-A-W-C-D?

Schroeder: Yeah.

Storey: So they're responsible to pay us the O&M costs, whatever costs they're responsible to pay us?

Schroeder: Yeah.

Storey: That's probably the repayment costs, is that right?

Schroeder: Yeah. It's the construction cost of the project.

Storey: How are they doing on that?

Schroeder: A certain amount of the construction costs.

Storey: They are allocated responsibility for repayment.

Schroeder: Uh-huh.

Storey: How are they doing?

Problems with the District Paying Its Bills

Schroeder: Well, they're not paying us. They can afford to pay us, but they're refusing to pay

us because they disagree with our billing method. They disagree with the amounts they're being billed. There's an issue over the Navajo Generating Station, the power supplied out of that station. The power supply was set up to pump the full amount of the water, 1.5 million acre-feet. If you don't pump that amount of water, there's a lot of excess power up there at that generating station that can go elsewhere, and subsequently with the districts going bankrupt and C-A-P, or the district, not being able to market the water, they can't market the power. So they signed a contract with Salt River Project to market the power on an interim basis, and interim being, I think it was set up for a twenty-year cycle, not tremendously long term, but long term enough that S-R-P wanted that power for the period.

So now you've got a situation where the district, in the government's view, is making a windfall profit off of the power, the excess power, because the anticipation was that would go for irrigation and water supply, and its not. There's twenty-some million dollars now off of that power marketing contract or agreement that the district claims is theirs just because of the situation that has come about, and the government is looking at this thing and saying, "Wait a minute. The intent of that power was to pump water, not to pay your bills back to the U.S. Government." So that's another issue that's tied up in the lawsuit.

Right now that money's going into the bank account and we're not allowing the district to use that to pay their bills. That plus the disagreement over how the billing process works, the district thinks we're overcharging them and we've had disagreements on every bill but the first one. They did pay the first one. But we're now 87 plus, probably about $90 million in arrears in their payment to the federal government over the last two years, and every indication is that they're not going to pay another nickel until the legal process runs its full gambit.

Now, the choice the federal government's got to make is are we going to continue to tolerate that or do we shut down the system, or do we take over operation. The problem we've got is we've got Indian water supplies mixed in there and we've got to supply the Indians. So obviously I don't think we're going to shut down the system. But there's major dollars involved in however this gets resolved.

Storey: Yes, when you start talking a couple billion dollars.

Schroeder: Oh, yeah.

Storey: They're set up on a fifty-year repayment contract?

Schroeder: Yeah.

Storey: So they've missed 4 percent of it by not paying. But the money's being held in escrow?

Schroeder: Not their payment money. The only money that's going into escrow is the power revenues that are generated from this contract for power that was signed amongst the government, S-R-P and C-A-W-C-D.

Storey: So we did concur in that sale of power?

Schroeder: Oh, we did, but that was in '93. They had made their first payment and it appeared to be a smart thing to do and it was rammed through, I guess, in the spring of '93, if I remember right. There were some people within Reclamation and within the department that didn't want to sign it, but politics being what they are, it was finally conceded that was probably a fair thing to do, allow them to go ahead and get into the contract, and then again things just kind of went to hell after that. So as it turns out, that money is just going into an account and its going to sit there until the legal situation changes.

Storey: Do you know what happens if the courts agree with Reclamation that they should be paying this full amount? Do we then assess them interest or something?

Storey: That would be the procedural thing to do. The political thing will be that they will probably introduce into Congress a bill that says they should be forgiven and get the interest and penalties forgiven because of the ambiguity in the contract. In particular, if we negotiate an agreement that's coming out of the chute, that's one of the first things they've indicated as part of their negotiation strategy would be no penalties, no interest. If that's their initial thrust, then, you know, that's going to be on the table. But right now their penalties are stacking up to the tune of $900,000 a month.

Storey: So if they came in and said to you, "We want to negotiate about this," or if Reclamation went to them and said, "We want to negotiate," who would be sitting at the table from Reclamation's side?

Possibilities of Renegotiating CAP Contract

Schroeder: Well, the last go-round it was elevated to the assistant commissioner level, basically Don Glaser out of Denver was the chief negotiator. I suspect it would be retained at

that level, at least at that level, possibly out of the department. But now with the situation involving a legal matter, the Justice Department's involved, it may have to involve even as high as the assistant secretary being involved the negotiation.

Last go-round, you know, everybody thought that it was at a high-enough level to reach decisions. As it turned out, the final decision was made by Secretary Babbitt not to go forward with the contract. Both sides at the negotiating team level thought they had reached an agreement. My understanding, anyhow, and how it appears and everything since, when the Indian tribes protested vigorously to the Secretary, Bruce Babbitt was the one who decided that politically he couldn't go forward with the agreement until and unless he got some of the Indian concerns dealt with, and that's when it bit the dust.

Storey: Do you know what they had worked out?

Schroeder: In terms of the negotiated agreement?

Storey: Yes.

Schroeder: Oh, it was a complicated package, but basically it had worked out to, I think the district was to pay $2 billion. The district was going to set up an escrow account to use to subsidize Indian water costs, some $45 million. The title to the headquarters complex was to go to the district. There were a multitude of things involved in that package, and I don't remember them all, but for the most part, they had worked out the major areas of disagreement and we thought it was a fair package on both sides.

The other thing that was involved is the Indian water had been increased by, I think, some 250,000 acre-feet to deal with some of the Indian water settlement issues that were floating around out there. But one of the things that upset the apple cart is the Indians wanted the authority and right to market the water however they felt necessary and however they could market it, which might mean interstate marketing as opposed to intrastate marketing. That was something the district just couldn't stomach. If that had gone through, from the district's perspective and Arizona's perspective, they wouldn't have settled for that, and that was another bottleneck in the final negotiations.

Storey: So the people negotiating for Reclamation had agreed to a cap at $2 billion?

Schroeder: Basically, yeah.

Storey: Am I thinking correctly that Assistant Secretary Rieke was involved at some point in this?

Schroeder: Well, she wasn't involved directly. She was always there as counsel and advisor to Don Glaser, and as the various issues surfaced, she was advised and she was given the opportunity to offer input. Ultimately the final decision rested with Bruce Babbitt, not with Betsy Rieke.

Storey: And he didn't feel comfortable?

Schroeder: I think politically he was in a box, probably. As the secretary he has a trust responsibility before the tribes, and as an ex-governor of Arizona, if it appeared that he had trampled on the Indian tribes to give Arizona a settlement that some would view as being a package that favored them, he would look terribly bad in a lot of political scenes. So he chose to back away from it and see if they could get a better deal for the Indians. If the Indians had supported it at all, it would've made a difference, but they unified essentially and all came together to protest and demand that the secretary not sign that agreement.

Storey: I'm confused, because I understood that Indian water had been allotted back, oh, about 1980, by Secretary Andrus.

Schroeder: Yes.

Storey: So now all of a sudden we've got 250,000 more acre-feet going to the Indians?

Schroeder: Yes.

Storey: I don't understand what's going on here.

CAP Indian Water Issues

Schroeder: Well, the allotments back in the eighties, I guess were anticipated possibly at that time of being enough water to satisfy the Indian claims. As it turned out, the Indians are claiming substantially more than that amount, and as they negotiate through these water settlements, are obtaining more water than was allotted, and in particular you've got the Gila River Indians who are claiming the rights to some 700,000-some acre-feet of water by themselves. And as it's turned out, as the settlements have taken place, just the amount of water available wasn't sufficient to meet the claims.

While the Gila River Indian claim on the water has not been finalized yet, the fact is that it would gobble up not only the previous full allocation, but would eat up a large measure, if not all, of that additional 250,000 acre-feet.

Storey: If I understand it, the federal government pays for the costs associated with Indian water, and the secretary made allocations for Indian water. Why can't he just increase his allocations?

Schroeder: Well, the allocations–the water was fully allocated, at least all but, I think, 60 or 65,000 acre-feet, somewhere in that range, of the 1.5 million, for M&I, for Indians, and for irrigation. The only reason the 250,000 acre-feet became available is because of the districts, their bankruptcy problems and the fact that they were willing to back away from their full allocation to get out from under the take-or-pay. So that's the only reason additional water was made available through that negotiation process.

Now, in terms of payment for the water, that's dealt with in the negotiations on the Indian settlements. The Ak-Chin negotiated a pretty smart settlement, I guess, in my view, because they negotiated an agreement whereby the federal government pays the costs to O&M. So when that water is delivered to their irrigation system, it's free water. The federal government pays C-A-W-C-D $6 or $7 million a year to cover the cost of that water. That's appropriated through Reclamation's O&M appropriation and is given to C-A-W-C-D as payment for the Ak-Chin water.

Gila River has not completed their negotiation, and right now they have a contract for 173,000 acre-feet and they would have to pay for the O&M for delivery of that water. So the water, right now I guess our cost estimate on it is $59.50. The district is charging 80-some dollars an acre-foot. The only reason Gila River isn't having to pay is because they're not taking water at this point in time. But if they do start to take water, they would have to pay the variable and the fixed O&M for delivery of that water.

Storey: And it's that high? It's somewhere around $70 to $80 an acre-foot?

Schroeder: That's the calculation that the district calculates it out to be, 80-some-dollars an acre-foot. Our calculation, what we think, it all goes back to how you interpret, again, the master repayment contract. The way we calculate it, it's based on the water delivered, not the 1.5 million. So if you deliver 700,000 acre-feet of water to calculate the O&M—I'd said that backwards. The Bureau of Reclamation divides

the cost by the 1.5 million acre-feet and that sets the price. The district divides by the amount of water they delivered, which is a smaller number. When you divide a smaller number into the numerator, you get a bigger cost per acre-foot. So the price goes up.

Storey: So let's see if I'm hearing this. That means that what they're doing is letting the people who don't accept delivery of water off the hook for the fixed and variable O&M cost?

Schroeder: Yeah. The district's position is that the United States should be paying at least the fixed O&M on the full Indian allocation, whether it's taken or not. Just because the Indian delivery systems haven't been completed, the water is locked up, it's tied up by the federal government for the tribes, and in their view, this could go on for–and again this was in the negotiation. I think a part of the negotiated settlement was we were going to pay an O&M component on the water allocated to the Indians, until and unless they started taking that water.

It gets complicated. I'm probably getting this whole thing confused. It takes a rocket scientist to decipher all the issue and address them appropriately. Larry probably did a hell of a lot better job.

Storey: It is really confusing. You said earlier that C-A-W-C-D, in effect, told us to get out of this facility here.

Eviction Notice

Schroeder: Well, yeah.

Storey: Why do they have that power?

Schroeder: They don't. We could tell them to, "Stuff it. We're going to stay as long as we feel it's necessary and appropriate." But I did reach an agreement with the district, recognizing that we were completing construction. Tom Clark was still their manager, district manager, and we reached an agreement three years ago that we would start to phase down, as construction was completed on C-A-P. We would first move from the core buildings, permanent facilities out to the temporary facilities. As we continued to downsize, at some point in time we would move off the site.

Since we have turned the operations of the facilities over to the district in

Phase I, the entire canal system, and we have turned over operation of New Waddell Dam and some of the other features, the district has hired staff and increased their staffing levels. We have downsized substantially. We've gone from 640 or so employees to current size of 318. But the fact is our work now is directed toward the Indian distribution systems. It's becoming less and less C-A-P work and more and more other activities. Since the facility was built for headquarters of the Central Arizona Project, I guess in my view I think we ought to move off here as soon as we can. We anticipated moving out right now, in June of '96, and set our target on that date. GSA has been unsuccessful in getting us a different location, and they set the date back to September of–

END SIDE 2, TAPE 1. JUNE 21, 1996.
BEGIN SIDE 1, TAPE 2. JUNE 21, 1996.

Storey: This is an interview by Brit Storey with Dennis Schroeder on June the 21st, 1996.

GSA had set you clear back to July of '97.

Schroeder: GSA set it back to July of '97, and so the district, in anticipation of our moving out on schedule, had set their staffing and their targets for renovation of the various areas within the buildings based on our schedule. They accommodated us for the first delay and were willing to accept a second delay up to probably December of '96, but when it went out into '97, we had a meeting with Ed and he essentially said, "How can I assist you in getting GSA's attention?" And I told him he probably couldn't, but if he felt compelled to write us a letter telling us the problems that they have in the fact that we're being delayed, I could use that, maybe make a trip to San Francisco and tell GSA we got other people besides Reclamation involved in this and we need to deal with it.

So they wrote a letter, and I didn't realize they were going to issue it as an eviction letter, but essentially they said, "You have until December 31st of '96 to get the hell out of here." (laughter) So they took a little stronger stand. If push came to shove and we would pass December, they couldn't remove us from the facilities, but I think in the interest of both organizations it's better we get out of here. My intent is to get us out as soon as possible and that schedule now is set for September of '96. We'll move into a temporary location first. It's going to be an additional burden on us, because we'll have to move twice. But I guess that's just the decision I made that we're going to do it. We're going to move twice and get out of here.

As this lawsuit progresses and other things take place and we move from C-A-P work to other work, I can feel comfortable and I can feel more comfortable with the staff not having to put up with the day-to-day association with the C-A-P staff. That's going to get worse as time goes on and they start feeling like we've got federal employees sitting in places where they should be. It's just ripe for deterioration, and I don't want incidents to occur that are unnecessary.

Storey: How long are you anticipating it will take to settle this dispute?

Schroeder: Oh, the dispute, I think with the complexity and the amount of money we're talking about and the issues they're bringing into it, a legal dispute could take probably four to six years. I don't have any basis for that, other than just the legal process moves slowly and this is not an easy one. If they went into a negotiated settlement, they might get it hammered out in six months to a year, but the department is continuing to put the Indian issues up front and they have to have some concessions from the district on the Indian issues.

The district has made it clear that as long as the secretary insists on making the Indian issues a part of this negotiation, they're not interested. The secretary's position is, as long as the district is unwilling to negotiate on the Indian issues, he's not going to negotiation, so right now we're going to continue the legal route.

Storey: So you're saying four or five years from now?

Schroeder: Yeah.

Storey: So a total of maybe up to seven years is that what I'm hearing?

Schroeder: I would say that would not be out of the question.

Storey: You mentioned Maricopa County and Lake Pleasant a little while ago. What's going on up there?

Lake Pleasant Re-Cap

Schroeder: Well, I think I went through some of the discussion on that before. But Maricopa County operated the park at Lake Pleasant before Reclamation ever placed that into the project arena. It was a small park operated on Maricopa Water District's reservoir. They had operated from '69 to '86 under an agreement with the Maricopa Water District and the county. They didn't get along, and when Reclamation came

into the picture and imposed the New Waddell Dam on that project and brought promises of a bigger lake and more water and major recreation facility very close to Phoenix, the county was promised that they would manage the recreation activities at that lake.

So there was an agreement signed between Reclamation and Maricopa County, I think in 1990, that they would be the recreation manager. Well, they thought that was the Godsend that would get them away from Maricopa Water District and give them full control of the lake. Maricopa Water District owned the water in the lake and owned the existing dam, and in order to accommodate C-A-P flooding out their old dam, they negotiated an agreement which was signed in 1988, and part of the negotiation for that agreement was to give Maricopa Water District 225 acres at the left abutment of the dam, the east abutment, and full rights to utilize the lake as they had done in the past. So you've got a situation now where the county thought they had the water district out. The water district was sufficiently astute to recognize that was going to be a boon to something up there in terms of development and recreation, and so as part of the agreement to give the federal government the right to build New Waddell Dam, they kept a foothold up there in what the county assumed was their park.

So the relationship between the county and Reclamation deteriorated, because the county thought Reclamation had given Maricopa Water District too much, and the Maricopa Water District prevailed in a lawsuit with the county over the fees generated at the lake. So the county had its nose bent out of joint on two fronts. So they, in November of '91, had a press conference and called Reclamation a two-faced, bald-faced liar and essentially we're talking about me, because I was new down here.

I can remember being up at the Colorado River Water Users Association and finding out that they had bailed out of the park and on no uncertain terms had said they were done and they can't trust Reclamation. So for whatever reason, politically that wasn't supposed to happen. Then I had to go work with the county and got to know Betsy Bayless [phonetic], who was supervisor of the board, or she was president of the Board of Supervisors, I should say. She didn't want to get out of the park. Lloyd Patterson, who was the county manager, is the one that made the decision to bail out.

So we spent the next year negotiating a three-party agreement that would bring the county back in as manager of the park, but it would recognize that Maricopa Water District was a player and had every right to do what they wanted to

do on their 225 acres. It also gave them access to the park and gave them the authority, which they already had with the agreement with Reclamation, to charge fees for their activities on their land with access to the park, but they in turn then had to guarantee that they would pay fees to the county as the recreating public moved onto the lake which then was part of the park.

So we negotiated a three-party agreement that set the stage for how much money Maricopa Water District now has to pay to the county for the rights to allow the recreationist to go onto the lake and into the county park. It's called a Three-Party Agreement and we changed that to the Operating Agreement. We developed formulas to establish how much it cost the county, per person, to provide lake patrols and lake safety and buoy movement and all that good stuff. We set the formula, and it has worked reasonably well. Its still got some loopholes in it. But the county got a new manager. The county got a new recreation director, and over the period of the last three to four years we worked out a–it's a fairly good arrangement of getting the water district and the county to work together to provide recreation up there and the fees are paid. There are still disputes that we get into, and Reclamation serves as the arbitrator in any dispute that occurs. But its been an interesting process.

The other impact of the county's pulling out was we shut down all construction of recreation facilities on the county side of the park. Now, up 'til that point the situation with Maricopa Water District and Reclamation was pretty bad, too, when I first got here. We had not reached agreement on what facilities we were going to build for the water district, but we had for the county, in some measure. Had the county not pulled out, we would have proceeded to build their facilities first. Once they pulled out and we stopped that process and continued working with the water district, the water district got the first marina on the lake, they got the first boat ramp on the lake, and they essentially got most of their facilities in place before we could get back up and get the county facilities built. The disruption was more than just the single year it took to renegotiate the county back into the park. It took another year to get the engineering designs and such in a condition where we could start awarding contracts and build the facilities for the county.

The other thing that happened was that the timing was very poor because had we been able to build the facilities for the county when we wanted to, we could've built the boat ramps all the way down to the low water levels. The water was way down, as it turned out, when we got M-W-D's boat ramp built all the way down to elevation 1502, which is the lowest water level in the lake, but the county's did not get built until after '93. In '93, the storms hit and the water level came up

very rapidly. So the boat ramps on the county side are at a higher elevation than the boat ramps on the M-W-D side, which was the county's fault. It was totally their fault that that whole thing got that screwed up. Rather than pulling out of the lake, had they come in and said, "We've got some concerns and we want to reach agreement on how we're going to deal with these costs associated with the lake and how the Maricopa Water District is going to repay the county," we could've dealt with that. We could've negotiated while we continued to build the facilities. But that's Arizona politics, I guess. You've got to show your muscle before you show your brain.

So we're continuing to try to complete the county facilities, $40 million worth of facilities out there that Reclamation is replacing and enhancing for the county. It's not small pickins by any means. But it was an interesting situation and sufficiently high. As I said, Underwood, as the commissioner, came out here and in the final stages of trying to get that agreement signed, made a push to get it signed just before the election in anticipation that that would give a boost to the Republican election effort in '92.

Storey: It was Dennis Underwood who brought you down here?

Schroeder: Yes.

Storey: What was he like as a commissioner? What was his management style? How effective was he?

Commissioner Dennis Underwood

Schroeder: I guess my impression of Dennis, he was pretty astute in terms of water engineering and water issues. Detail oriented. He did not get into the personnel organizational management issues, as such. He stuck pretty much with his area of expertise, which was the politics of water and contractual relationships and so on. Organizational things that changed within Reclamation were basically at the assistant commissioner and other levels in the organization.

Dennis did attempt to implement the Strategic Plan and was here when we attempted to put some meat on the bones of the Strategic Plan and tried to put more definition in the various chapters of the Strategic Plan on where Reclamation was

going to go in the future.[8] There were, I don't know, ten or fifteen documents addressing specifics of various functional areas and future areas where Reclamation might go in terms of energy and water and environment and so on, under his regimen. Dennis, I guess he stayed pretty much within his area of comfort and that was not in managing the large organization that Reclamation represented. I liked him. He was honest. He was straightforward. He was professional. You could trust what he told you and he would attempt to do what he could to assist in making decisions and working through problem areas. He doesn't make snap decisions. He wasn't one to jump to a quick conclusion to things. He does his homework. If you sent him something, he would read it. His reputation was always one of caring around a big suitcase of paperwork and he would work twelve, sixteen hours a day trying to keep up with everything, which can get to be a little overwhelming. But he was good, I liked him.[9]

Storey: After Mr. Underwood came Mr. Beard.

Schroeder: Dan.

Storey: Dan Beard.

Commissioner Dan Beard

Schroeder: Yeah. Dan, it's kind of strange to say, but I did like Dan, too. He was totally different than Underwood. Dan was not a detail person, not that he didn't understand the details, but he just didn't want to waste his time with details. He was extremely outgoing, and he was almost the opposite of Underwood. He didn't tie himself up in knots over details. He liked the big picture when he was informed of a problem. He didn't want to get into all the nuts and bolts.

Organizationally he had a mission. He knew where he wanted to go with Reclamation. He knew what he wanted to do in terms of the organization and how Reclamation was structured. As a matter of fact, he got into the nuts and bolts of the organizational layout of Reclamation and the powers of the R-Ds and the

8. Reclamation's *Strategic Plan* discussed a refocus of efforts in multitude Reclamation activities such as dam safety, environment, and water conservation and came out in multiple reports, see United States Bureau of Reclamation, *Reclamation's Strategic Plan: An Implementation Plan for ...* (United States Bureau of Reclamation, 1992).

9. For more information on Dennis Underwood, see Dennis B. Underwood, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews, conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, from 1995 to 1998, in Los Angeles and Ontario, California, www.usbr.gov/history/oralhist.html.

powers of the Tech Service Center and how the relationship between the project offices at that time related to the regional offices and of the Tech Service Center. Dennis had just turned that totally upside down. He wanted to empower the area offices.

Storey: You mean Dan.

Schroeder: Dan. What did I say–Dennis? His mission was to move the power out to the fields or the field offices and get the power out of the central control of the R-Ds and the assistant commissioner of the Tech Service Center or the Engineering and Research Center.

A lot of the things I didn't like about Dan, you know, not very long after his initial foray into the field, he essentially, as I understand it, requested the resignation of Mr. Webber. That was probably necessary for Dan to start his process of getting out of the old thinking and into the new. I don't think Darrell was ever an old thinker; he was pretty progressive for somebody in his position. But in Dan's view, Darrell did not have the thinking that Dan wanted in the position that he was in. So Darrell was gone.[10]

Joe Hall didn't take long to disappear. I think Joe was politically inclined in a different direction than Dan, and so Joe didn't make it too far past Dan's coming on to Reclamation.

But beyond that Dan, wanted to listen to people at the staff level and he formed his team–I forget the name of the report, what did they come out with–

Storey: CPORT.

Schroeder: CPORT.

Storey: Commissioner's Program and Organizational Review Team.[11]

Schroeder: There you go. Anyhow, that was notorious in how it was set up because it was all

10. For more information on Dan Beard, see Daniel P. Beard, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews, conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, from 1993-1995 in Washington, D.C., www.usbr.gov/history/oralhist.html.

11. The "Report of the Commissioner's Program and Organization Review Team" which Reclamation published in 1993 is commonly known as the CPORT (pronounced "see port") report. It was one of two major 1993 documents produced during Commissioner Beard's reorganization of Reclamation. The other document was Commissioner Daniel P. Beard's *Blueprint for Reform: The Commissioner's Plan for Reinventing Reclamation*.

regional people on that team. As I recollect, nobody from the Denver office associated with that report, which is mighty strange, because if you look at the way we had done it back in the eighties, when I went on the Strategic Planning Team it was represented by Darrell Webber and it had three or four people from out in the field. Terry Lynott was the other one, Terry was a major player in the Denver office at that time, he was on that team.

So the power structure was totally turned over by Dan, and Dan got into human resource issues and he wanted to do all kinds of things associated with bringing more women and minorities into Reclamation's management structure, and he did. He forced that issue and did move minorities and women into positions in Reclamation that they had not occupied prior to that time. So he was successful in what he accomplished. He also brought the Tech Service Center to its knees in terms of downsizing and getting them oriented in the direction that he felt it needed to go. He stripped away the ability to aggressively pursue outside work until he was comfortable with the size of the organization and then he changed his mind and said, "Well, okay, now that things are where I want them to be, maybe doing some work for E-P-A or for other agencies isn't so bad. Let's take another look at that," and he reversed his position.

That was one of the things about Dan that was a little bit different. He had a mission. Once he accomplished his mission, then he could reverse himself and say, "Okay, now let's stabilize here and we'll allow some decisions to be made at the management level," that he may not fully support and agree with, but recognize that they might be important to the organization. So he was willing to let them proceed, but it was only after he accomplished his purpose that he was willing to back off.

Storey: What about the decentralization? How did you see that effecting you here as the head of an area and a newly formed area office, newly denominated, I should say, area office?

Decentralization

Schroeder: I think the impact probably in smaller offices was more significant. The impact in Phoenix was essentially negligible. We had a staff of 640 people down here. Bob Towles was regional director. Bob was pretty laid back. He'd been on this project for the previous five years. I think Bob had had a bellyful of the problems and politics of C-A-P. He wanted to get the hell out from under them. And the fact is we operated pretty autonomously in terms of construction and decisions about the project.

The only place the region really got involved in our activities in Phoenix was in contract issues when the irrigation districts got in trouble. They were contracts–contracts were delegated to the regional level, but not below. They were a support office for us, but in terms of what we did here to construct the project, make decisions on how we were going construct it and how much money we needed, that was essentially a Phoenix-level operation. Phoenix at that time was known as the seventh region or eighth region, I don't know, regional office, anyhow.

So when Dan empowered the regional offices, it didn't make a whole lot of difference. What it did was disrupted the regional office a whole lot more than it did Phoenix, because they were trying to figure out what all that delegation meant and how the region then had to separate itself from some of the money they controlled and move that out to the area offices, included in Phoenix, and nobody felt too sorry for Phoenix because we had the biggest budget in Reclamation, and now for the region to have to give up some of their budget and move it down to Phoenix, that was a traumatic experience and they didn't want to dismiss any staff. Of course, where the money goes, the staff goes with it. If you move money out of the regional office, the staff obviously has to go down there and up in area offices.

So for smaller offices, I think Roger Patterson in California made some significant moves and empowered their offices much more so and there were changes in other regions with the smaller project offices that probably were a bigger impact than here. It just didn't affect us that much.

Storey: You've been on the reorganization team, I think, for the Denver office.

Schroeder: I sat on that team back in, what, '94? Worked with Larry VonThun and others in trying to restructure the Denver office after CPORT and as this area office concept came into being.

Storey: How do you think that's working?

Schroeder: I think there's some parts of it that make me pretty nervous. I've seen some correspondence come out of Denver, several pieces of correspondence, and I can't remember exactly what the issues were, but I kind of grimace because they weren't signed by somebody on the leadership team. They were signed by somebody I did not recognize the name of within the organization at the design-team level, making major, what I considered to be major dollar potential decisions that just occurred to me to be at a totally inappropriate level within the organization.

I think with the empowerment and the responsibility also goes a responsibility of recognizing when in the hell you're getting out of your bailiwick and signing correspondence that you may not know what you're signing. And in that essence, even if you sign it, it ought to be going up to the leadership team, and when somebody asks a question, "Does this look appropriate to you guys?" somebody with whiskers and some experience, rather than sending things out or making commitments that may not represent what Reclamation needs to be representing.

I think their customer service ethic is probably continued to improve. I think we started that process back in the late eighties of trying to strip away the power, the symbolic power or whatever, and the controlling and the dominance of the Denver design groups and the decision that they've made, and make them more amenable to suggestions that might come in from the regions in the field. I think that has improved and continues to improve. I think they recognize that if they piss their customers off constantly, the customers have the right to go elsewhere now and in terms of the area office concept. So they try to do a good job.

I think Jim Malila has done an excellent job up there in trying to make this thing work and trying to manage the financial situation and make sure the staffing level fits the work load so that the overhead costs don't run out of sight. Its working, but there's some loopholes there that they need to track and monitor and make sure nothing major slips out of there that hasn't been passed off on by the higher levels of the organization. And by higher levels I mean technical expert levels, not necessarily just the manager that doesn't know what the hell he's doing, but managers like John Smart and John Lease and Rich Sauner [phonetic], those guys I've got a lot of respect for. They know what they're doing. They know, based on their experience, what's good and what may not be so good when it comes out of there.

Storey: Has that issue been raised?

Schroeder: Yeah, as a matter of fact, I sit on a board of directors and was up there last week. The commissioner was there and everybody was very complimentary, including myself, on what they've done financially in terms of bringing the organization in line with reasonable costs and so on, but I did raise the issue before the board, "Don't get too complacent and comfortable, because you need to be careful about some of these loopholes in terms of who's in power to sign what and also make sure the technical specs maintain the quality that it has a reputation for in the past, and somebody needs to monitor the quality of the material that's coming out of there,"

because we've had a couple indications the quality–

END SIDE 1, TAPE 2. JUNE 21, 1996.
BEGIN SIDE 2, TAPE 2. JUNE 21, 1996.

Storey: You indicated you were on the Strategic Plan Team that Dennis Underwood put together.

Schroeder: No.

Storey: No?

Schroeder: No, this was Dale Duvall.

Storey: Oh, this is a different strategic plan that I'm thinking of.

Schroeder: Well, it was the first strategic plan.

Storey: Tell me about it.

The Strategic Plan and *Assessment '87*

Schroeder: Well, you go back to 1986.

Storey: This is the reorganization plan, then, for 1988 and '87.

Schroeder: Well, it preceded that.

Storey: Tell me about this process and what happened.

Schroeder: It's 1986. This precedes my tenure at Denver. I was still at Bismarck, North Dakota. I had been on the airplane, I guess, with Darrell Webber, I think that was, I don't know, May of–I'm losing track, May of '84 or '85, and got to know Darrell a little bit. Anyhow, they formed this Strategic Planning Group, the S-P-G. "Rolly" Dolly headed it up. It was under Dale Duvall's tenure as commissioner. But it was put together because of Darrell Webber's concern that we needed to look at where Reclamation was going. He could see the fact that the C-A-P had peaked out in terms of design and there were problems associated with the Central Utah Project, and they were becoming obvious. Darrell was concerned that there wasn't enough work in the future for Reclamation and we ought to be looking at what was going to

happen as we approached the nineties and beyond.

So he got Dale Duvall to put together this Strategic Planning Group, and it consisted of Roger Patterson, who was not an R-D at that time, he was–

Storey: Probably assistant R-D in Billings.

Schroeder: I think he was assistant R-D in Billings at that point. And Rick Gold. Rick Gold was project manager of Durango, I think, or maybe not even at Durango at that point. But anyhow, Rick Gold was on the team. I said Rolly Dolly headed it up. Darrell Webber was there. Frank Knell was our facilitator. Terry Lynott was on the team and I was on the team. I was the lowest ranking member on the totem pole, I think, at that time, being assistant project manager out of Bismarck.

But, anyhow, we went through quite an exercise of trying to formulate some concepts of where we envisioned Reclamation going. I can still remember one of them was, you've got to dance with the gal that you brung. I think that was one of Terry Lynott's little sayings. The issue was should we be going after E-P-A [Environmental Protection Agency] work. At that point in time, hazardous waste super fund was suffering a bit and the Corps of Engineers was getting into that work, and it was an area that we thought maybe Reclamation should move into. But the recommendation that came out of that group was that we probably shouldn't go that direction, stick with water, water development, and water resource and those kinds of issues.

So we put together the Red Book and we did a lot of field interviews. We went out to the various states and talked with state engineers. We did a questionnaire and went out and talked to regional office people and project office people and private enterprise people, consulting firms, and the A-G-C, and structured the first strategic plan, which was the Red Book.

An interesting thing happened about the time we completed that process and the Red Book went forward to Dale Duvall for his review and approval, and that was that Jim Ziglar was appointed as assistant secretary. Jim Ziglar didn't feel that he wanted Dale Duvall putting out a strategic plan that Jim Ziglar didn't pass muster on or approve.

When we got done with our assignment, I think it was between May and September of '86, approximately, the work disappeared. The Red Book disappeared. You couldn't find a copy of it anywhere. The only copies that existed

were as if the team members had absconded with their draft copies and kept them. I had a whole boxful of material at home. But Jim Ziglar, shortly thereafter, appoint Joe Hall to head up the Strategic Planning Team. Terry Lynott was on that team, but he appointed a whole different cadre of people that then picked up the ball in '87 and formulated the "Ziglar Strategic Plan" that didn't have Dale Duvall written on it anywhere. It became Jim Ziglar's Strategic Plan, and Ziglar came out and promoted it. I can remember him coming to the Denver office, and by then I had been moved to Denver. But as you read through the Joe Hall-led team strategic plan you could see an awful lot of our previous work in there, so it wasn't for naught. But it just was taken up by a different group and probably a–well, bigger group, and it changed somewhat. But that's the politics of the process. When Jim Ziglar came in, the whole thing turned around and went a different direction.

Storey: Then out of that came what, *Assessment '87*, was it?

Schroeder: Yeah. While the Strategic Plan was '87, I think it was maybe Assessment '88.

Storey: Assessment '88.

Schroeder: Yeah. The assessment followed on to the strategic plan. Then out of the Assessment '88 then came Dennis Underwood and his tweaking of it and then trying to put the meat on the bones that were represented in that Assessment '88.[12]

Storey: Sitting where you were in the E&R Center in Denver, what did you see that the reorganization in 1988 was trying to accomplish? What did it accomplish?

Schroeder: Oh, man. Well, I guess the biggest thing was it was designed to move the planning organization into Denver because there was not, in all appearances, there was not sufficient new project planning going on in the various regions to accommodate the size of staff that the regions had.

So one of the things they thought was that moving planning into Denver, you could reduce the size of the organization, and if it was a mobile organization, you could then send planning teams out to the regions and the projects for whatever duration a planning project took, and that you could accommodate the efficiency and effectiveness. You would have a higher level of talent available and not disburse it so much throughout the regions. So that was done.

12. *Assessment '87: A New Direction for the Bureau of Reclamation*, prepared by a team of career employees of the Bureau of Reclamation under the direction of Joe Hall (Washington, D.C.: United States Department of the Interior, Bureau of Reclamation, 1987).

I guess the other thing was, the general impression in Reclamation at the time, the Washington office had 250 or so people, and the decisions that were being made and the power represented by Washington wasn't much appreciated. So the intention was to bring the power and the decision-making within Reclamation out to the Denver office and put it presumably wherever the central hub of the organization was and downsize the Washington office to accommodate the program and budget and politics that was necessary, but get the decision-making and the functioning of the organization out into the field where it "belonged." Those were the two major things tied into that.

The other thing that happened along the way was the Amarillo office, of course, closed down and the Great Plains Region expanded to the size it is now and essentially is now three regions. Previously what was three regions is now all the Great Plains Region. Jeez, organizationally, I guess we set up the resource management side, which was the previous–well, Terry Lynott came out from Washington to head that group up. Then you had the Engineering and Research Center. We had initiated a reorganization when I got there in '87. So we were pretty much unencumbered and not much impacted by the '88 reorganization. It mainly affected the O&M side of Reclamation and the Washington office.

Storey: You would've still been there when Joe Hall had the meeting to announce that Mr. Lynott was stepping down from the assistant commissioner for resources management.

Schroeder: Yeah.

Storey: Did you ever hear anything about what happened?

Schroeder: Not specifically. I had my own impressions. I think Terry was caught between a rock and a hard place. I think he had to absorb a substantial amount of high-level staff that had come out of Washington, some of them, a lot of them from the regions, most of them pissed off and without direction, without a mission, without understanding what they were supposed to do, and probably in total disagreement with what had happened. So you had an organization that was, I think, in our view, from the ACER [Assistant Commissioner Engineering and Research] side where we thought we were just functioning like a well-oiled machine, as you looked over to ACRM, [Assistant Commissioner of Resource Management] they appeared totally dysfunctional, and I think Terry probably had some tough decisions to make that maybe he didn't make or maybe he couldn't make. But everybody would look at the ACRM organization and wonder, "What in the hell is going on? Why don't

they do something and why don't they get some direction and understand what they're supposed to be doing and start doing it?" It was costly. Their overhead costs were much higher than ACER at that time.[13]

So I think the decision was made that maybe a change in leadership might get the direction straightened out and get some semblance of organization to the ACRM side of the E&R Center. So Terry bit the dust in that process. They brought Bill Martin in, which was kind of a surprise, at least it was to me. I wasn't sure that Bill was the guy for that job, given the planning and O&M function of that organization. But Bill came in from Sacramento, I guess.

Storey: From Billings.

Schroeder: Oh, from Billings, that's right. He had been moved to Billings. Well, hell, he had been in Denver before that. Anyhow, Bill came down from Billings. Then he brought his sergeant-at-arms, Ray. What the hell was Ray's last name?

Storey: Ray Willms.

Schroeder: Ray Willms, yeah, Ray Willms. They formed quite a tandem that was supposed to redirect and reorient and get ACRM headed the right direction, but it still didn't happen. I mean, you can't make a silk purse out of a sow's ear. They still didn't have much to do in terms of new project planning and in terms of O&M. The O&M was, in large part, handled in the regions, and you can't make something function if you don't give it direction and the money to operate on. So in large part, they operated on a G-A-E funding and were trying to deal with policy issues that, I don't know, really didn't have the wherewithal to deal with and were still in, I think, the old mental attitude that they'll dictate policy and everybody will succumb and march to their tune, which was not about to happen.

We had some duplication. We had some areas within the Engineering and Research organization that were dealing with water, underground water, ground water. Let me see. There were two or three areas where we had a significant overlap and we thought if ACRM would give those functions to the ACER organization, it would be a hell of a lot more efficient and make more sense and would essentially marry up the organizations into a better unit.

13. For more information on Terry Lynott, see Terry P. Lynott, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, in Lakewood, Colorado, edited by Brit Allan Storey, www.usbr.gov/history/oralhist.html.

Bill Martin didn't see it that way, and we had several conversations with Bill and his staff, and at one point, not very long after Bill got into the position, when Darrell had made these forays over to Bill Martin and had proposed some things to combine organizationally to function better, Bill Martin came to a retreat that we were having with our division chiefs, Webber and I, and essentially told us to forget it, that it wasn't going to happen and we could quit talking about it, so we did. So they went on functioning the way they were, and we did our thing. I think, you know, as it turned out, nothing ever very much improved within the ACRM organization that I could see.[14]

Storey: What else should we talk about? What haven't I been smart enough to ask you that I should have?

Schroeder: I don't know.

Storey: Did we talk about Dale Duvall? I don't think we did.

Schroeder: We haven't talked about Dale.

Storey: As a commissioner.

Commissioner C. Dale Duvall

Schroeder: No. He was the first commissioner that I really got to know a little bit, and I didn't know Dale very well. I guess I got to know him probably best when we went to Durango, and that was the first year I'd been in Denver and we were at the program conference. We went to Durango, and as it turned out, we played golf with people who wanted to play golf one afternoon. Dale and I, for whatever reason, wound up as a twosome. So here I am playing golf with the commissioner of Reclamation and I'm just a new deputy commissioner or assistant commissioner at the E&R Center. So I wasn't all that comfortable for the first couple of holes, but Dale was pretty congenial. He was easy-going, friendly guy. I didn't get the impression that he was all that astute in terms of Reclamation and water issues and all the other stuff, but we had a nice round of golf.[15]

14. For more information on Billy Martin, see Billy E. Martin, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian Bureau of Reclamation, from 1994 to 1996, in Sacramento California, edited by Brit Allan Storey, www.usbr.gov/history/oralhist.html.

15. For more information on Dale Duvall, see C. Dale Duvall, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interview, conducted by Brit Allan Storey, senior historian, Bureau of (continued...)

Storey: Who won?

Schroeder: Oh, I kicked his butt. Dale couldn't play golf worth a hoot, but he had fun doing it. (laughter)

Storey: Anything else?

Schroeder: I can't think of anything.

Storey: Well, I appreciate you taking time and I'd like to ask you whether you're willing for the information on these tapes and the resulting transcripts to be used by researchers.

Schroeder: Oh, sure.

Storey: Thank you.

END SIDE 2, TAPE 2. JUNE 21, 1996.
BEGIN SIDE 1, TAPE 1. JUNE 20, 1997.

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation, interviewing Dennis E. Schroeder, the area manager for the Phoenix Area Office in Phoenix, Arizona, on June 20, 1997, at about nine o'clock in the morning. This is tape one.

Well, Mr. Schroeder, it's been about a year since we talked, actually one day less than a year.

Schroeder: Is that right?

Storey: Yes. I wanted to talk about what's happened in between and since you've announced your retirement, talk about your perspectives now looking back on Reclamation and all that kind of thing. One of the big things that's going on, of course, is the lawsuit with C-A-W-C-D. How's that coming along, and has there been any progress in the last year or so?

Litigation with CAWCD

15. (...continued)
Reclamation, January 26, 1993, in Washington, D.C., www.usbr.gov/history/oralhist.html.

Schroeder: There hasn't been a whole lot of progress. They're proceeding with the deposition stage, which is taking a long time. They've talked to all the primary people involved in it, including Dan Beard and all the historical participants in the formation of the contract and actually formation of the project.

But actually there is maybe a flicker of light at the end of the tunnel, because both sides are starting to talk negotiation again, and the secretary has hired a new person in Washington named David Hayes [phonetic], who was hired to deal with Indian settlement issues. But it sounds like he may get involved in being the mediator to bring the parties back together and try to negotiate a solution to the problem. So it may take shape this summer. It's looking better than it did for a long time.

Storey: Are the discussions going on in Phoenix or in Washington, or do you know?

Schroeder: Well, its just preliminary right now. The district president, Grady Gamage [phonetic], went back to D.C. in May, I think in around May 20, thereabouts, and met with the secretary. And, of course, [Secretary of the Interior Bruce] Babbitt being from Arizona, they're well aware of each other. Stemming from that then has come this proposal that maybe we should proceed to negotiate.

I don't know what has triggered it. I think Babbitt's position for the last year and a half is get through the deposition stage and each party evaluate what the strengths and weaknesses of the cases are, and then maybe we can talk turkey. So that's the position that both parties are in now, coming through near the end of the deposition. I think there's probably a reevaluation going on. Plus the fact that everybody's well aware that this can be one heck of a costly litigation that's going to take a long time, and it really doesn't solve the problems. So even if we litigate on the basis of this contract, the project is still not solvent in terms of the contract issues that are involved, and I think that's part of the driving force behind getting to a negotiated settlement.

Storey: Could you talk more about that? You're saying the project isn't solvent?

Schroeder: Well, solvent in terms of being the project that it was anticipated to be. With agriculture in the state its in; bankruptcy in some of the districts; the fact that agriculture's not taking as much water as they anticipated; the fact that the Indian distribution systems are still not built and the Indians aren't taking the water yet; municipalities are demanding more water. In terms of the contract as it stands, it just doesn't fit the real-world situation now ten years after that final contract was

drafted.

So the best thing for both parties is to renegotiate and reallocate the water and deal with groundwater recharge, which is a big part of Arizona's plan now and possibly some interstate marketing of the water. All those things are on the table.

Storey: And, I gather, part of California's plan is groundwater recharge, too, in Arizona?

Schroeder: In Arizona. That's right. They're anticipating banking water in Arizona, which also was not originally anticipated. So the whole thing has changed.

Storey: But wouldn't, for instance, the economics of the project be improved by providing more water to municipalities and less to farmers?

Schroeder: Sure.

Storey: My understanding is they pay a higher rate.

Schroeder: Yes. Yes, they pay the full market value of the water. And, yes, that would improve and enhance the capability of the district to deal with their financial needs in operation and maintenance of the project.

Storey: Do you have a sense of where the areas of negotiation are going to be or might be?

Schroeder: Well, of course, heretofore, the secretary has always maintained that the Indian issues and the Indian water settlement issues have to be dealt with in these negotiations, and the district has always maintained that that's not their problem, it's the secretary's problem. While they will talk about that, they don't view that as part of their contractual dealings with the secretary.

So I think the big part of the negotiations will involve a reallocation of the water supply; it would involve the pricing of the water for both the Indian users and the agricultural users, as well as municipalities. So its kind of a redistribution, reassessment of costs and the redistribution of the water. There's some other minor issues that–I call them minor; they involve millions of dollars, probably up to $20 or $30 million. One of them was the filling of New Waddell, which is about a 24 or 25 million dollar disagreement. But those are fairly minor in terms of the overall project.

Storey: That's pumping the water out of the canal up into New Waddell?

Schroeder: Yes. The first filling was the issue there.

Storey: The electrical charges and whatever they charge for depreciation, I suppose.

Schroeder: Yes.

Storey: If I were being very cynical–or if I were an outsider being cynical, maybe is the way I should put it–I might argue that what's going on is that C-A-W-C-D is just simply trying to prevent or to delay having to pay its bills. How would you respond to that?

Schroeder: I don't think that that's probably the real issue. They have managed to delay paying their bill for a short period of time, but the fact is its going to catch up to them, and it serves no purpose. The fact is they can afford to pay the bills in the short term, and they could do that right now, if they so chose. They've got a couple of hundred million dollars in the bank. They need a long-term solution. They realize that. Even if they won the terms of the litigation, the time would come when they would have to start paying, even under the existing contract, a substantial amount of money each year, and they would still have the issue of the Indian water and how to deal with that. That's a federal responsibility, but the question is when does the federal charge or the federal payment for O&M kick in, and I think if the government prevailed, then that doesn't serve the district's purpose.

So I don't think that's a big part of it. That's one of the things that they have chosen to do is not pay their bill. But the fact is the judge hasn't required it, and the federal government hasn't pushed that issue. We've allowed them to go in arrears for the last several years and have not pressed them on paying what we think they owe us. So they've come out ahead, at least to this point, but it can't last very long.

Indian Water Settlements

Storey: Let's explore the Indian water issue a little further. I understood that the Indian water was a Department of the Interior Secretary responsibility, and basically that what was going to happen was that the expenses of providing the water were going to be paid by the department. So I don't understand why there's an issue with C-A-W-C-D in terms of money. Is it in terms of who gets water or what? What's that all about?

Schroeder: Well, actually it depends. The settlements, the early settlements, the Ak-Chin settlement that was dealt with, I think, in the late seventies, early eighties, the Ak-Chin Tribe managed to arrange for the federal government to cover their operation-

and-maintenance costs of the water. The Tohono O´odham got a trust fund set aside to help them cover the O&M costs. But over the decade of the eighties, the federal government backed away from this in-perpetuity relationship with the tribes where the government has an ongoing cost of covering operation and maintenance.

So the settlement negotiations really have been pushed away from that in terms of where the federal government comes from. They don't want these ongoing appropriations required for paying for Indian water, and its been made a more difficult thing for the tribes to negotiate.

So at some point in the Indian water settlement, the tribe–at least Gila River, which is the major tribe right now–is trying to get a settlement and would have a major impact on the project. At this stage, the anticipation is they're going to have to cover their water costs. So that's just an area they're going to have to deal with, and I don't think the secretary's going to accept the responsibility of paying their operation and maintenance. At least that's the position of the federal government at this point.

Storey: So if the federal government's providing a settlement, we're also providing a bill at the same time.

Schroeder: Yes.

Storey: Am I understanding this?

Schroeder: Yes. That's a big issue with the Gila River Settlement is how can you arrive at a settlement that makes the water affordable to them for agricultural purposes, which is what they want to use it for, at least at this point. And that one still is yet to be solved.

Storey: Somehow it doesn't sound like a settlement to me.

Schroeder: Well, and, you know, that's why its taken so long. It's up to the Gila River Indians to deal with that, and the arrangements and what they agree to in a settlement has to take that into account, and they realize that. So I think that's one of the areas that's making it difficult for them to come to resolution on their issues.

Storey: Who's working, say, with the Gila River Tribe? Is that Reclamation? Is it Interior? C-A-W-C-D evidently doesn't want to be involved.

Schroeder: No, the district is not involved. Mainly it's the parties who they're claiming their water from. Salt River Project is one of them. The water users are the Gila River, mainly, and the groundwater pumpers. Some of the irrigation districts are involved in the discussions. As far as the government is concerned, its not a Reclamation issue, its an Interior issue, and the department establishes a negotiating team. I don't know who heads the team for the department on that one. They've got teams set up for each tribe that's involved in the negotiations for settlement.

But in the case of Gila River, there is a team. They meet periodically. It's a pretty secretive process. They don't want publicity. They don't want the terms of the negotiations that are ongoing publicized and known by a lot of people, and each side holds their cards fairly close to their vest. So Reclamation provides technical support when they've got an issue in terms of what's the impact of this groundwater pumping on Gila River and trying to quantify the water involved. We get involved in that circumstance, but for the most part we're fairly well removed from the negotiation process.

Storey: So we don't have a member on the team or anything?

Schroeder: Well, we've got Debbie Saint, who is the Native American Affairs liaison person in Phoenix, works for the regional director, and she stays involved in the process, and is a representative from Reclamation on the team. But I think Debbie's the only one.

Storey: And she reports to the regional director, not to the area manager?

Schroeder: Right. We just provide technical support as requested.

Storey: Yet this settlement might potentially have a significant impact on C-A-P?

Schroeder: It could, depending on the amount of water involved. The Gila River is already contracted for 173,000 acre-feet, and I think there's a potential for their requiring up to another 100 to 150,000 acre-feet of water from the Central Arizona Project system. So, yes, they would be the biggest water user of the project, if and when settlement occurs.

Storey: So now I notice you've been talking about who pays O&M costs. Who pays construction costs is my question. Is that the government pays that?

Schroeder: Well, at this point, yes. The government subsidizes the construction costs for

agriculture. I think they pay two dollars per acre-foot is the construction charge. The actual construction charge is much higher than that, up to probably 45 to 50 dollars per acre-foot. The municipalities pay the full cost, and that price is up in the 85 to 90 dollar per acre-foot range at this point, which is the charge that C-A-P would put on the Indian tribes if they were to charge them for water.

As a matter of fact, we pay for the Ak-Chin the same rate as the municipal charge, as far as I know. So, yes, it's important. There's no relief. At least without something in the settlement, there's no relief from the full cost of the water for the tribes or Uncle Sam, depending on who's paying that fee.

Storey: So they have to pay both construction and O&M costs?

Schroeder: Yes.

Storey: One of the things I'm interested in is how the different entities in Reclamation relate to different kinds of activities, and contracts with irrigation districts is one of the areas. You've been talking about the lawsuit and the contract and all of that. How does all this work? First you've got to do the contract. Is that something just Reclamation did, and now because its at issue, its elevated to the secretarial level? We've got the area office, formerly the project office. We've got the regional office. We've got the Washington office in Reclamation, all of which might become involved in such a thing. How did that work for C-A-P, do you know?

Schroeder: Well, then I should go back and correct something, Brit. The charges for the Indian water would be the full cost. But for the tribes the secretary has the ability to make the construction charges nonreimbursable, and that's what happens. So they pay the full cost of operation and maintenance, the fixed and variable O&M, and would have to pay the construction fee. But, in fact, its forgiven under the–I think it's the Levitt Act [phonetic] that provides relief for the tribes on the construction.

Multiple Actors in Reclamation Water Contracts Negotiations

In terms of the litigation and the process of trying to renegotiate with the district, you remember Don Glaser was appointed by the secretary to head up the original negotiating team. I think they felt that it was a big enough issue, there were large enough amount of dollars involved, and the issues were significant enough in terms of water allocations in Arizona that it required higher than area office and even higher than a regional office involvement. As a matter of fact, Don actually was serving the secretary and not the Commissioner of Reclamation when he

headed that negotiation team. And it also involved B-I-A [Bureau of Indian Affairs]. Barry Welsh [phonetic] was on the team. In other words, there were other agencies that were sitting at the table, and the decision was just made that it had to be at that level.

So there again, the area office provided the background, the historical intent of what was in the contract, and provided technical advice to the negotiating team in terms of what they should and should not be negotiating on. But the negotiations themselves were dealt with at the departmental level, and that's going to hold true this time.

One of the issues that the district had with Reclamation and with the department when the principles of the agreement were arrived at in '95, was that negotiations and the lead negotiator, while it was Don Glaser, Don Glaser couldn't make the final decision. In other words, they could negotiate all they wanted, but when the negotiations concluded and they thought they had a resolution, then the decision had to go back to the secretary, or assistant secretary, at that point was Betsy Rieke, and she wasn't about to make the decision without involving the secretary because it required his signature.

So even though the district could arrive at what they felt they could arrive at was a conclusion to the negotiations, it always involved a couple of steps higher with the government to get approval, and in the end it essentially broke down on that basis. The negotiating team and the district reached what they thought were a final settlement of the issues, at least in terms of proceeding with a new contract, and then it escalated up for signature to the secretary, and he refused to sign based on protests from the Indian tribes and others.

But the fact is, the district themselves, while they claimed the government negotiation team and the leader of that team did not have the decision-making capability, in fact, the district had the same problem. Their lead negotiator was the head, the manager of the project, Sid Wilson. And while Sid could negotiate what he thought was a final conclusion, it always had to go back to the board. And when the board got what was thought to be the principles of agreement in terms of final settlement, they, in fact, changed a couple of things in terms of interstate marketing of water and dealing with the Indian water issue. So when they changed it, then the secretary refused to sign it. They blamed the secretary. The secretary blamed them. So the whole thing crashed, came tumbling down.

But David Hayes has got an excellent reputation as a negotiator and a

mediator, and I think the anticipation would probably be, I think, the secretary's got a lot of confidence in him. He gives him high marks, and he's the secretary's self-appointed, self-hired person. So it may be a different story this time. But the old settlement, the old principles of agreement are all wash out. I mean, everything's off the table. So it will have to have some new ideas, new people involved, take off the blinders and start all over and try to proceed with a new agreement. And that's not going to be easy.

Storey: Who negotiated the contract, do you know?

Schroeder: That was a team that was made up of–I don't know all the names. I know Larry Morton was involved at the area office level, and there were regional people involved. I think LeGrand Neilsen, who is now the assistant regional director, he was the 400 Chief at the time. I think LeGrand was involved. Probably had the economist, regional economist, and the regional contracts person. And then they had a couple of people out of the Washington office on the team. I want to say Phillips. But they had one or two people out of the Washington also involved in those negotiations. That was before my time. That took place back in '87.

Storey: Would this Reclamation-wide involvement be because C-A-P was such a large project, or is that normal, do you know?

Schroeder: I think it was because C-A-P was such a big issue; the biggest project in Reclamation. It involved significant water issues for the state of Arizona, controversial. A lot of Indian water, which made it a secretarial issue as opposed to just a Reclamation issue. So in terms of previous negotiations for contracts with districts, it probably had a lot more significance than normal.

I think the Garrison Project, for example, was negotiated with the district through the regional office. The Washington office would have approval, major project, but not of the consequence and significance that C-A-P had. It was fairly unique.

Storey: All of this must be sort of stressful for the area office, or is it?

Politics

Schroeder: What has happened is extremely stressful, and its been one of the major, major issues for me in terms of deciding to retire a bit early. What the district has done, I think we had not reached the stage where the district went on the floor of the House,

and essentially in the dark of night and behind closed doors the Arizona delegation got with the political powers within the board, C-A-W-C-D's Board of Directors, and decided on a strategy to get the secretary's attention, and that strategy was to slash our budget without our knowledge, without any pre-warning. And they had exchanged correspondence with the district back and forth to the delegation that was not given to us in July of '96. I was in Albuquerque at the time, and I got a phone call that says, "Congressman [Jim] Kolbe has just recommended slashing the C-A-P budget by $20.88 [million] dollars," and it caught us totally off guard.

As it turned out, they had some errors in the numbers. They not only were cutting appropriated dollars from Congress, but they were cutting contributed dollars from the cities, and their initial effort was pretty silly and it was embarrassing for the delegation not to have their facts and figures correct. But even when they corrected their figures, they still cut us by $12.88 million last year, and they cut it in such a way that they slashed line items out of our budget, and the line items they cut are non-contract costs, which were the salaries of the people doing the work, among other things.

But that process was impossible to deal with, so we had to make a choice. For example, they zeroed-out our non-contract cost available for funding the activities of Lake Pleasant. Well, we had a $7 million construction award ongoing for construction of an outdoor education center. We had a $7 million contract ongoing for construction of a campground. And there's no way you can not spend money on staff. Whether you go ahead and complete the contracts or whether you stop the contracts and shut everything down, you still have all of the issues associated with the termination by the government.

So what they did was ridiculous, in my view, but the members of the delegation didn't understand that, even though we tried to explain it to them. They accused me several times of "ignoring the will of Congress." I heard that from several of the congressional staff people and, as a matter of fact, heard from a member of the delegation. [Congressman] John Shadegg took me to task, and when I explained to him the situation, he understood it.

END SIDE 1, TAPE 1. JUNE 20, 1997.
BEGIN SIDE 2, TAPE 1. JUNE 20, 1997.

Schroeder: But it didn't do any good. We went back and met with Senator [Jon] Kyl, specifically with the assistant secretary, Patty Beneke, and I and Bob Johnson, and his admonition to us is, "Don't let this happen again. This is an embarrassment for

Arizona. It's an embarrassment for all of us. Get with the district and negotiate a budget."

So when the president issued the budget on February 5th of '97, this year's budget, we went straight to the district and met with them, explained our budget, gave them copies of our budget documents, and asked them to look at them, consider what we're doing, and then we'd get back together and re-discuss where they had concerns and see if we could work it out. That was on February 6th. By February 7th, that entire package of information had been shipped back to the Washington office to Congressman Kolbe, and with the specific content that we were ignoring the '97 budget cut, that we were spending money where we had been told not to spend money, and that we should be stopped from doing that.

So the whole thing crashed and burned immediately coming out of the chute. That started telling me that this was a different issue than a negotiation of a budget. There was something else going on here. As a matter of fact, Patty Beneke then met with Congressman Kolbe, and Kolbe had our budget document back there in his hands, and when he met with Beneke, he took her to task for our spending money in areas that they had told us not to spend money. She immediately had a conversation with our office and said, "You guys stop. Stop doing what you're doing." So I issued a memo saying cease and desist on the areas that we could stop on, and that's where we've been ever since.

The district has gone forward with a request for a $6 million cut out of our budget for '98, and they claim it's only 10 percent of a 60 million dollar budget. But, in fact, if you separate the $25 million that's allocated for Navaho scrubbers, which is pass-through money, and we had $26 million in there for the Indian distribution systems, which is untouchable, the fact is we only had–I guess it was $20 million for the scrubber–but it left us with a $14 million operating budget. So when they cut $6 million out of the budget, $3 million was for environmental or Endangered Species Act work and $3 million again came out of non-contract costs. The real cut to us was about 35 or 40 percent of our operating budget. So it was significant. While they make it sound just insignificant and, "It's only 10 percent of their budget," the fact is it was much greater than that.

But that remains to be seen, whether Congress goes along with that cut or not. But again, the handwriting was on the wall that this was a bigger issue than just negotiating the budget. And as it turned out, I've had conversations. We met with Grady Gamage, president of the board, and we got down to brass tacks. At one point, I said to Grady, "Grady, what you're telling me is that no matter what budget

we negotiate out here in the field with C-A-W-C-D, you're going to go back to Washington and request cuts."

And he said, "That's true." He said, "We can't reach agreement because it gets attention, provides us an audience back in Washington, D.C., and we're not going to give that up. We want to make a splash in the news." And so no matter what we settle on, whether its reasonable or not, they're going to take issue with it.

I also talked with one of the staff people with Congressman [Bob] Stump, who was active at Lake Pleasant and I dealt with quite a bit in past years, in '91, '92, '93, and I just asked her point blank, "What the hell is going on?" And she said basically that this was an agreement between the delegation and the district and that it was at a high level, it was something that they had decided to do, and no matter what we did in Reclamation, it was going to remain a strategy that they were going to use to make the secretary come back to negotiations and renegotiate the contract. So that's where we find ourselves.

Storey: So they're trying to put pressure on the secretary to reduce the amount of the contract, I presume, or the terms?

Schroeder: Well, they're trying to make a point that they, in fact, do have the destiny of the project within their control, not the secretary, and they can dictate and control how the project proceeds, I think, is the message back to the secretary. Even though he may want to get the Indian distribution systems complete and other components of the project completed, without the support of the district, it becomes almost an impossibility. And I think that's the message. They want to show the secretary that they've got as much at stake and as much muscle in dealing with it as the secretary does. And that's not Big Government against C-A-W-C-D; its two equals trying to negotiate a reasonable solution.

As a matter of fact, Sid Wilson essentially made that point, I think, in one conversation when we met with him in '96, trying to discuss what they proposed for the '97 budget cuts. He made the statement that this was not going to be Big Government running over top of another irrigation district, that they were going to take care of what they thought were their issues, and they were distressed by the fact that in the previous negotiations, the secretary thought he could just run over top of them and they weren't going to allow that to happen. So its kind of like Tyson and Holyfield squaring off. They just wanted to make the point that they were a major party in this and they weren't going to let the federal government run over top of them and dictate the requirements of the final solution.

Storey: Sid Wilson is the executive director at C-A-W-C-D?

Schroeder: Sid is, yes, the manager. General Manager is his title.

Storey: At C-A-W-C-D.

Schroeder: Of C-A-W-C-D. And they've changed their name. Its not the Central Arizona Water Conservancy District. They changed it to the Central Arizona Project.

Storey: C-A-P.

Schroeder: C-A-P. They took over the name.

Storey: When did they do that?

Schroeder: They did that in '96, I believe. Summer of '96. While we still call them C-A-W-C-D, all their correspondence and stationary says C-A-P.

Storey: They are C-A-P.

Schroeder: They are C-A-P, that's right, which causes some confusion.

Storey: Last year did we take a cut in funds that were earmarked for environmental?

Schroeder: Yes, we did.

Storey: What kinds of problems does that cause for Reclamation?

CAP Environmental Issues

Schroeder: We had a jeopardy opinion and a biological opinion, some, let me say, R-P-As, Reasonable and Prudent Alternatives, which were negotiated with Fish and Wildlife Service and with the Plan Six cities for Roosevelt, for the construction of Roosevelt Dam, raising of the lake. They tried to cut those monies out of the budget, and Salt River Project came to the defense of Reclamation and we managed to get the money back in for that. So that is proceeding. And we're in a lawsuit with the Southwest Center for Biological Diversity. But, in fact, we're complying with the reasonable and prudent alternatives in that case, and we've probably got a pretty strong case before the judge.

In the other one, it was the Gila River Fish Opinion, is what it's called, and it involved reasonable and prudent alternatives that the estimated total present worth of the corrective actions is about 12-13 million dollars. The district has never supported that. They've been against it all the time. It involves the construction of four fish barriers, two on the San Pedro River drainage, and two on Arivaipa Creek. We had money, I think, from about $4 million in the budget, to begin construction on those fish barriers, and that was cut out of the budget and it never has been put back in the budget. So we have not been able to comply with the Endangered Species Act on that opinion. In fact, we're in court on that one, and a judge looking at that would probably have to conclude that we're not in compliance and that the Southwest Center for Biological Diversity has a good solid point in the fact that while we have an opinion and we've agreed to do certain things, we're not doing them. So we're not in compliance and we'll probably lose that suit on that basis if it goes forward.

The strange part is Congress has not risen up and defended their Endangered Species Act and inserted the money back in, and made it clear to the district that while they might not agree with it, it's federal law and the federal government will fund and proceed with carrying out the agreements that were made in those biological opinions. So we're not in good shape on that one. If it goes forward this year, the district has again asked that the $3 million we requested be cut out of the budget. If that is cut out, it will be the second year in a row that we're in noncompliance with the Endangered Species Act in that arena. So, yes, they're hitting us in the environmental area fairly hard.

Storey: Is that an area they've picked out particularly?

Schroeder: Yes. That one is really stuck in their craw, for whatever reason. I think they view it, it was the first opinion that was a jeopardy opinion on the project. We had, I think, 41 or 42 non-jeopardy opinions, and while there was environmental mitigation requirements and we anticipated doing some environmental enhancement as a part of the project, when this opinion hit, it was the first jeopardy opinion issued. It took three years to negotiate it, and when it was issued in, I think, '94 is when the final opinion came out, the district was very much against it, not only in terms of what it was going to cost, but just the principle of the thing.

Subsequent to that, we got at least two and, I think, three more jeopardy opinions on endangered species, one at Roosevelt Lake, one on delivery of water to Tucson, and one on Tucson terminal storage. The Pima pineapple cactus was an issue down there. So it kind of set the snowball in motion and it has gathered

steam. And while the first twenty-five years of project construction have no jeopardy opinions and the cost was fairly insignificant, the late stages since '91-'92, the construction of the project is on a big increase and we've got a price tag of up to $40-$45 million in Endangered Species Act costs stacked on top of things. So while the district was trying to stop that from happening, they were unsuccessful, and the fact is those opinions have gone forward. We've negotiated the best we could, but its gotten fairly costly.

Storey: Have you seen a change in the way environmental or endangered species issues are handled in recent years?

Schroeder: Yes. I think it has changed substantially. I think in terms of both the staff at Fish and Wildlife Service and in terms of the environmental groups, they've been successful in applying different sections of the Endangered Species Act, and the costs and what they're demanding in terms of jeopardy or mitigation for these species has gone significantly higher than it was in the past.

You can see that even in the operation of Lake Mead. They're demanding now that the storage capacity of Lake Mead be compromised to preserve the willow trees in the upper end of the lake. They call it the delta area. But they want to preserve those trees as nesting habitat for the southwestern willow flycatcher. The fact is, the trees wouldn't be there if it wasn't for the lake. But that doesn't make any difference. If the birds are now in the trees, their view is that the lake cannot come up and flood out those nests, because that's an endangered species.

So they've gotten much more aggressive since probably 1990, at least in Arizona, and their demands are much greater and the price tag has gotten significantly higher than in the past. That's coming both from within Fish and Wildlife Service, I think because of the suits being filed by the environmental groups. They have required that the Fish and Wildlife Service get a lot tougher. So, yes, I think its changed quite a bit.

Storey: Yet it seems like the [Bill] Clinton administration is backing off on a lot of things.

Schroeder: Well, as Dan Beard once said, perception is more important than reality. The Clinton administration puts up a good front, and they speak to the environmental issues and they want to show a good environmental record. But the fact is, in terms of our problem with C-A-P, we could have told Congress to go to hell. We had the money in our budget from carry-over funds to proceed with implementation of the Gila River fish opinion, and the assistant secretary, Patty Beneke, made strong

statements that, by God, we're going to proceed. But, in fact, she has never given us the authority to go ahead. She has put us on hold for the last year and a half.

So while the perception is we have a strong environmental stance and we're going to do what we need to do to comply with the environmental law, they don't want to fight the issue out either on the floor of Congress or they didn't want to fight it out in court. But I don't think we have a choice in that now, because we're in litigation on two fronts, three fronts, really, if you take in Lake Mead. So its going to come out.

But, yes, I think Dan was right. What's out front is a strong environmental stance by the Clinton administration, but in reality they don't want to poke that sleeping dog any more than they have to. So we kind of just sit in limbo in the field, waiting for things to happen.

Storey: We had the district change its name and all these other things. What other kinds of things have been going on in the last year?

Further CAP Developments

Schroeder: Well, let me see. The Gila River Indian community has proceeded with their self-governance agreements with Reclamation. We call them annual funding agreements. What happens there under the Self-Determination Law, as it was amended in '94, it gives the tribe the ability to go ahead and do their own program in lieu of Reclamation doing it for them. They can request the program and, in effect, what we do is turn the money over to them and they proceed with design and construction of the project.

So we've done that. This is the third year. The first two years we gave them significant amounts of money based on paper work plans that they presented that showed that they could use the full appropriation. In fact, we knew they couldn't, but we decided to go ahead and pass the money over to them anyhow for the first couple of years to see if they could accelerate and catch up with the funding that was available. In fact, they haven't been able to do that, and they've only spent about half to two-thirds of the '96 appropriation, and the '97 appropriation is untouched as we speak. Its still sitting in the bank. Once you transfer the money over to the tribe, they put it in an account and it draws interest, and the federal government can't get it back. By law it's their money then to spend on the project.

Against our better judgement and against our recommendations, the assistant

secretary chose to give them full funding for the first couple of years. But in an agreement with me, I told Patty Beneke, the assistant secretary, that somewhere, sometime, probably in year three, we've got to draw the line and bring the appropriations that are going to the tribe in line with the needs of the project. So this year we have got earmarked $13.2 million that would go over to the Gila River Indian community. In fact, they've still got $25 million in the bank from previous years, and there's no way in hell they can spend the '98 money in '98. In fact, they won't even get to spend the money they've already got in the bank. So this year is kind of the year of, call it come-to-Jesus time, you know. It's the time of reckoning on the appropriations and what they show in terms of their work plan and whether they're real or not.

The funny part of what's happened this year, though, in April the assistant secretary made a decision that she didn't have time to deal with the Gila River community issues on C-A-P, and so she has given the commissioner of Reclamation the responsibility of bringing this process in line and dealing with the decisions to be made on the Gila River Project. So now Mr. [Eluid] Martinez has that ball in his court. I'm retiring, so I've given him my input and my recommendations on it, and they're going to have to deal with it at some point.

Storey: Doesn't have time when the ball gets too hot.

Schroeder: The ball got very hot, or it will get very hot this year.

Storey: Could you explain what the project is?

Schroeder: The Gila River?

Storey: Yes. Is the money a grant or loan or what?

Indian Distribution Systems

Schroeder: Well, the money, as far as the C-A-P funding, the Indian Distribution Division has always been a part of the project, and the Ak-Chin Indian Distribution Systems were built as a part of it. The original estimates were fairly insignificant. The estimated cost of the Indian distribution systems has gone from somewhere, I think, in the original estimates $25 or $30 million is part of the $800 million, $832 million project. There is now reserved in the cost ceiling 486 million dollars for the Indian Distribution Division. So it's grown substantially.

The Ak-Chin has been dealt with. The Salt River Pima-Maricopa Indian community system has been dealt with through settlement. And the Fort McDowell tribe has been dealt with through settlement and small project loans. The Tohono O′dham Nation has a settlement, but its not gone very far. So they have anticipated going into construction for the last couple of years but haven't been able to get there on Shatalk [phonetic], which is a small irrigation project. Gila River Indian community's system is by far the biggest. The master plan calls for 146,000 acres of irrigated agriculture there. The C-A-P portion of that is 77,000 acres. And then you have the San Carlos Apache and a couple of other Apache tribes that also have some allocation of C-A-P water.

So those systems were always part of the project. The requirement in the past has been no settlement, no construction. With the Clinton administration, it became even though we didn't have a settlement, if we had a water service contract, which the Gila River Indian community has, then we can proceed with construction, and that's what's happened. We're not into construction yet, but the design phase of the project is well under way.

Storey: So now are the costs of these Indian Distribution Systems going on to the costs to C-A-W-C-D of the project?

Schroeder: They're a part of the cost ceiling, but they are not a reimbursable component in terms of C-A-W-C-D. They're a federal government obligation as a part of the, I guess, trust responsibility to the tribes. And depending on how the settlement terms come out, that dictates the way in which the federal government then deals with C-A-W-C-D. Well, it doesn't dictate what we do with C-A-W-C-D. That's pretty well set. But it dictates how the federal government will deal with the cost of the system with the tribe in terms of both project construction and the cost of the water.

Storey: Any other major issues in the last year or so?

Lingering Issues

Schroeder: I don't think we've had major ones. We've tried to complete the activity at Lake Pleasant, I have been unsuccessful partially because of the budget cuts. We've essentially completed all major construction on the project. The only major feature left, other than the Indian Distribution Systems, is the Tucson Terminal Storage, and until Tucson gets their issue sorted out with delivery and use of Central Arizona Project water, that terminal storage facility won't be built. So it lays out there as a potential component to be completed, but, in fact its going to take several years to

resolve that issue.

Storey: That's the storage reservoir where the water has to be pumped from the treatment plant up to it? Am I thinking correctly?

Schroeder: Well, no. It would be gravity feed from the main canal into the 15,000 acre-foot reservoir, which essentially is a constructed reservoir. There are no acceptable places there in which we could build a dam. So essentially you build a four-sided reservoir and the water would flow into it by gravity and then flow into the water treatment facility, again by gravity with some pumping required at certain stages. Its not an emergency storage. Its an operation and maintenance regulatory reservoir.

Storey: How's the move of the office coming? I think we talked about you receiving a notice to get out.

Schroeder: Oh, yes.

Storey: Or to not get out, but what was it? To vacate.

Schroeder: Yes. We moved out into an interim office on Nineteenth Avenue and Desert Cove. Its essentially a big warehouse. But its turned out to be reasonably comfortable. We moved 130 people into that facility in October of '96, and we now have a lease for a new office building that's now under construction, and we're scheduled to move again into that facility probably in February or so of '98. So it's going smoothly. We moved out of the facility of Seventh Street with all of the staff that was in the permanent facility. We still have 90 to 95 people, mostly engineers, engineering and construction, in the trailers that we had out there as temporary facilities during construction.

When we move into the new office, what remains of the staff will all move into the new office building on Dunlop and Twenty-Third Avenue, I believe. So its fairly close to where we are right now at Desert Cove. And when that happens, then we will have totally vacated the Seventh Street site, which will make us happy and makes the district happy as well.

END SIDE 2, TAPE 1. JUNE 20, 1997.
BEGIN SIDE 1, TAPE 2. JUNE 20, 1997.

Storey: This is tape two of an interview with Brit Storey with Dennis Schroeder on June 20, 1997.

So, by February, March of next year, probably, of '98, we will be completely out of the Seventh Avenue site.

Schroeder: Yes. That's the anticipation.

Storey: What's going on with the staff? Are we in the process of reducing staff, still, or has that already occurred, or is that still in the future or an ongoing process? What's going on?

Schroeder: Well, the final buy-out was March of '97, and we had thirty or forty people, I think, leave at that time. So our staff has come down from essentially we were at about 270, I think, or 280. At the start of fiscal year '97, we came down about another 50 to 60 people. We're at a staff level of about 210 right now, 212.

We have under way a reduction in force (RIF) that will take it down again this fall, September. The second week, I believe, of September is the final stage of that. That will be a reduction in force of another, I think, 17 positions are impacted and 17 people will leave the office with a targeted staffing of 195. But in reality, we will be down after that RIF to about 181, and we have 14 positions that don't match up with the staff that's departing. So there's a potential that we'll hire 14 new people in different professional areas.

But the reality is, with the budget cuts continuing now, we have been essentially cut out of the work at Lake Pleasant, which was going to involve some engineering design field staff, and with that going by the wayside, we will probably have to reduce the staff another fairly significant amount in '98, which is what the district claims they wanted us to do anyhow. They want us to eliminate as much staff as possible. Their stated position is that they want to save the federal government some money and be efficient and economical. The real fact is that they're just decimating our professional and technical capability. And when you're in litigation, the more you can gore the other person's ox in terms of their ability to defend themselves, the stronger it makes your position. So that, again, has been a major irritation to me, that that's being allowed to take place with the consent and involvement of the entire Arizona delegation.

Storey: Why are we out of Lake Pleasant? I don't understand that. The last I understood we had commitments to do certain activities out there.

Schroeder: The commitments are still there. The activities will continue. The last go-around on this issue was in May, and I had initiated a process whereby we were trying to

get permission to proceed with competition of the facilities at Lake Pleasant through the delegation, and they asked us to provide a cost estimate of what it would involve in terms of our contract and noncontract costs. We did that, and to complete our replacement facilities out there, our estimate was it would cost us between $400,000 and $450,000 of staff cost to do that, provide designs and construction management and so on.

The county, I thought, was supporting us on that, but, in fact, the county got with the delegation people who were involved and said, "Gee, we can do it for $150,000." Therefore, the delegation took that and essentially said, "Well, gee, that's $250,000 less than Reclamation's estimate, so we'll just turn that work over to the county." So, in fact, the county underbid us to complete that work. So now the move is afoot to simply pass the money through to the county and let them proceed with all the design and construction of the completion facilities at Lake Pleasant, which takes it out of our hands again. So its another part of the picture that displaces Reclamation from doing work that we would normally do by passing the money straight through to the recipient or beneficiary of the activity.

Storey: But then do we still have to verify that the work's been done and all that sort of thing?

Schroeder: Under the old Bureau of Reclamation, our oversight would have been fairly intense and fairly involved. We've become much more lenient on that in terms of our oversight, and essentially we provide the money and if the facilities get constructed, that pretty much concludes it and takes care of it. We don't do nearly as much auditing activity, I think, as we would have done in the past. It becomes more or less a grant process.

But in terms of the work at Lake Pleasant, what the county is dealing with is our estimated cost of doing the work, so really the risk for us in not that great. We're using our cost estimates to provide the funding. The way it was set up in this year's money where they outbid us for the activity up there, they used our cost estimate of 1.004 million dollars for the facility and that's the amount of money that's locked in. If they build it for less than that, we probably pay the amount that's less. If they build it for more than that, it's on their shoulders. They would have to come up with the additional money. So it relieves us of the obligation that we have and it locks in a certain price tag, so its not all bad. There are some benefits to us.

Storey: But the pass-through obtains that release for us then?

Schroeder: Yes, it would.

Storey: That's interesting. Other major issues. How about oversight of C-A-W-C-D's operation and maintenance programs? Do we do any of that kind of thing?

Schroeder: We do, and that's fairly well established. We've been doing that in the past under the operation and maintenance during construction agreement, and now since '93, since we turned over the facilities, we've done it for the past four years under a work plan agreement. We submit a work plan to the district showing them what our anticipated costs are going to be for the oversight activity, and it becomes a fairly routine exchange of paper. They are required to pay our costs for that oversight. They get to look at what the oversight is going to be and agree or disagree with it. If they disagree, we have the option of either negotiating a resolution with them or just tell them to go to hell. And we think it's a requirement and then we fund it under the basin fund, which we still have control over. So one way or the other we can provide the oversight we think is necessary, whether the district agrees with it or not. That's one area where I think we're still in good shape.

Storey: As I recall, we were getting ready to make a declaration of substantial competition on Lake Roosevelt last year.

Schroeder: Yes. We did that.

Storey: Any issues that came up?

Schroeder: That was Phase II. We declared substantial completion of Phase II and, in fact, have turned over the operation of Roosevelt to Salt River Project. We're essentially done up there, at least in terms of the dam. There's some clean-up activities continuing, but they're fairly minor. We still have the Endangered Species Act requirements that will be ongoing.

So Phase II of the project has been turned over to C-A-W-C-D. We gave them a letter and a bill for payment. That payment was to be received for Phase I and Phase II. The first payment was in January. January 15th of '97 was the first payment for both stages of the project. We billed them something, I think, in the area of $88 million, and they paid us $10 or $12 million. So we're substantially apart in terms of what they think they owe us. They calculated what they think the owe us. We bill them for what we think they owe us. They pay us what they think they owe us, and the rest remains on the books in a state of limbo.

The department has not decided to take a tough position on that yet. We, in fact, under the terms of the contract show they're in arrears now in their repayment obligation by more than twelve months. If you read the letter of the law, in the repayment contract it says that the secretary shall not deliver water if the district is in arrears by more than twelve months. So our position at the area office would be we ought to be shutting them off from the water. The realty of the politics is that that's not going to happen, especially since we're in litigation. The judge would probably intervene and not allow that to happen, and the impact would be on the water users, which is not C-A-W-C-D. They simply provide the water. The real beneficiaries, which are the cities and the ag districts, who would get cut off of the water, are kind of the innocent bystanders in this whole contract issue. So while the contract may say you should shut off the water, the realty is its not going to happen. There's got to be a resolution of that somehow. And then the books will be brought into balance at some point in the future.

Storey: You mentioned that you decided to retire. Was there any specific point? Was this sort of just a growing thing, or what?

Reasons for Retirement

Schroeder: Its been growing. I have been getting more and more frustrated and probably less and less effective with C-A-W-C-D as the project is completed. Its kind of like I had several public audiences where I was on the agenda and Sid Wilson was on the agenda, and the district would come out with some really ridiculous statements, one of them being Reclamation shows a billion dollars of work yet to complete on the project. They've already completed Stage One and Stage Two, and they're billing us for that, and we're operating and maintaining the system. Where in the world can the Bureau spend another billion dollars? In fact, they know the answer to the question, but it makes good politics to throw that out to an audience that doesn't understand the issue.

Most of that remaining project completion requirement is in the Indian Distribution Division, which is $500 million, and there's another portion that completes the scrubbers at Navaho. They're well aware of the money that's involved in that. There's a requirement for completion of the requirements of the Endangered Species Act. They're well aware of those. So what the district has been doing is blowing a lot of smoke and gas out. Sid Wilson, in public, has said that we're overstaffed, we're wasting money. Their repayment obligation is involved and, in fact, its fairly insignificantly involved, and we've shown that. But those kind of things are difficult for me to deal with. I can deal with people who

disagree with me and you have a truthful disagreement and you can deal with your facts. But in the political arena that doesn't necessarily happen.

So I went before the district board and was accused of scolding them. In fact, I probably was. I was raising hell with them. And one of the issues I raised, and Sid Wilson was sitting there as was the entire board, and I took issue with the false statements that were being made and the blatant overstatement by Mr. Wilson and other members of his staff on our office size, and I pointed out the fact that we've come down from a 700-person staff to 200 people and the fact that in '91 to '94 the district had never taken issue with our budget and the budget at that time was $200 to $250 million. The staff was between 600 and 700. Never once were we accused of being uneconomical, inefficient and a fat bureaucratic monster. It wasn't until the litigation began in '95, July of '95, at which time our budget was down to $90 million, and our budget now had dropped down to in '97 it was proposed at 74. In fact, with the cut, it got dropped down to 58. This year we requested $60 million.

So what I was trying to point out to the board was, under my tenure as project manager, we have spent almost a billion dollars, over 800-and-some million. I had a staff of 700 people under my jurisdiction and control, and nobody ever questioned it. As a matter of fact, they were encouraging us to complete the project and get the New Waddell Pump Generating Plant in operation, which we did, and expended large amounts of money, totally impacting them in terms of their repayment obligation, and they were cheering us on. And suddenly after litigation started, our budget is well down, fairly limited, our staff is way down, and now they're taking us to task for being fat and bloated bureaucrats that are wasting taxpayer money.

I just have a problem dealing with that, especially when I know its not true. We've done a hell of a good job of downsizing the office, had five, going on six, reductions in force over the last three years. We moved off site at the district's request to make it easier for them to operate and maintain the facility. So its been a difficult time, and even during that time we've been able to complete other stages of the project and do the job.

It just thoroughly pisses me off to have them blackballing us and taking us to task in the press and elsewhere in Arizona, when, in fact, they ought to be thanking us for doing one hell of an extraordinary job of completing that project and getting the water, a reliable water supply, into Arizona. I wrote Grady Gamage a letter a couple of weeks ago and essentially laid all that out. I displayed all the

accomplishments, displayed what we had done in terms of downsizing and told them that the state of Arizona, the district, and the delegation owes the Phoenix Area Office a debt of gratitude, not a tar-and-feather routine. That was just something I had to get off my chest before I left, and that has been a major component in terms of my deciding to retire and step aside and let somebody else deal with it. Just frustration.

Storey: How long have you been there now?

Schroeder: I've been there six years as of May 6th. It's the longest I've stayed on any of the jobs in Reclamation. Prior to that, it was four years. Mostly about four years I usually moved on to something different.

Storey: When are you retiring?

Schroeder: July 3rd.

Storey: '97?

Schroeder: 1997, yes.

Storey: What are your plans then?

Schroeder: Take a couple of weeks to prepare some things around the house and there in Phoenix, and then we're going to hit the road, Diane and I. I've got a new Dodge diesel pickup, and we've got a thirty-foot travel trailer that is comfortable. Its got a nice slide-out, so it's a nice unit, and we're going to travel back through her old stomping grounds in Oklahoma and visit some friends there and go up to Hutchinson, Kansas, and visit her father, who lives there, and then go on over to Muskatine, Iowa, and visit my mother and brothers and sisters there. We'll probably go back up through Bismarck, make a big circle, go up to Bismarck, North Dakota, and visit Art Orlean [phonetic], who's an ex-Bureau construction engineer, [unclear] and play some golf and such with the old compatriots in Bismarck. May go over to Billings, Montana, and visit the people there that I used to know from my work in Billings. And depending on the time–this is all going to take a while, but we may go down through Boise, Idaho, and then back through Denver and then back to Phoenix for the winter. So I anticipate probably a two-month excursion, August and September. Just plan to relax and enjoy.

Storey: And Phoenix in the winter. That's nice.

Schroeder: Phoenix is nice in the winter. Diane doesn't like the heat in the summer down there, but she doesn't like the heat in the summer anywhere. But Phoenix, I can't sell the dry-heat routine. People just don't buy that anymore. (laughter)

Storey: There's a comedian at the Tropicana in Los Angeles and he says, "Oh, but its dry heat, and I say to them, 'Well, so is a blowtorch.'" (laughter)

Schroeder: Yes. That's true. I try to explain the thermodynamic law of evaporation and B-T-Us and all that good stuff, but it doesn't work. When its 115, its 115.

Storey: But you're planning to stay in Phoenix?

Schroeder: For now. Probably stay there for at least a year, possibly a couple of years. Then I would look to move probably to a smaller community, maybe up towards Denver. We've got a lot of friends here in Denver. Diane likes the weather much better in Denver and Colorado, the scenery. So at some point we may get back to Colorado. But we're going to take our time and decide that over the next two or three years.

Looking Back at the Changes in Reclamation

Storey: Looking back over your career, in and out of Reclamation, as it were, how has Reclamation changed? What's gotten better? What's gotten worse, etc.?

Schroeder: I think, at least from my perspective, as I've gotten higher up in the management in Reclamation, maybe my point of view and perspective has changed. I'm looking at it from a different level than in the past. I think the old Bureau was much more authoritarian, had much better compliance with its own regulations and policies and so on. I think here in the last ten years we've drifted away from a lot of that and become, in large part, a paper tiger in terms of how we are able to deal with the district. We've essentially lost our constituency and our political support in a lot of areas, and I think its hurt us badly. We just don't have the muscle and ability to deal with the issues like we did in the past. We get rolled and are not able to take a strong, solid stand in areas where in the past we would have stood up and made our viewpoint stick.

I think the dismantling of the authority and the policies associated with the Denver Tech Service Center has caused some problems. We went too far, in my view. I think the Denver engineering group ought to be the provider of choice, number-one priority, for all the regions and all the area offices, notwithstanding the fact that they're accused of costing more. My experience at Denver has been that

we had a hell of a capable staff. Yes, we probably did blow it in some areas where we charged too much for too little, but overall I think when you sort all that out, the technical capability is there, its good, its solid, its needed for the caring of the infrastructure that Reclamation has, and a lot of the area managers now don't understand that, and even some of the regional directors. So they take their work elsewhere, and Denver can't do a damn thing about it.

Denver took a stance in '94 when they reorganized, that it was up to the R-Ds and the area managers to make a choice of whether they even wanted to come to Denver for their technical support.

Personally, I thought that was a mistake then and I think it's a mistake now. I think Denver, in order to survive, has got to have some assured work coming in from the regions. And right now it's the choice of the area managers, and a lot of the work out there is not coming to Denver, its going elsewhere out into the consulting arena.

I notice by the numbers this year that came out of here that Denver is in the red in terms of their operation here, which in the red by, I think it was $1.6 million was the projection that they could be in the red by over $3 million at the end of this year. That's not a good sign. That indicates that the work is not coming in here and they've got too much staff for the work that does exist. So I think the R-Ds and the policy team under Eluid [Martinez], who is an engineer, Eluid understands the requirements to bring the work in here. They need to deal with that, and I've tried to make the point at all the area manager meetings that unless and until they become convinced that Denver is an essential part of Reclamation's future, they're going to be continuing to struggle.

I think the other area that has frustrated me substantially is the Clinton administration. Family-friendly workplace, do anything, put everybody on flexible time, comp time, you name it, you lose an awful lot of ability to control the work and how the work gets done. I think the push to get a distribution of minorities and women into the workplace has to be done probably in Reclamation as it is elsewhere and is happening, but the way that its happening is frustrating, because what they're dictating now is that you don't have a choice. The manager is going to be held accountable for bringing the numbers into alignment, so you're no longer selecting from an applicant listing of the best and highest qualified, you're selecting from a list of qualified candidates, and if it involves minorities or women, they're being given affirmative selection processes. It may do well to bring our numbers in line. It destroys the morale of the white professionals on the work force. So while it does

good in one area, it does severe damage in another area, which is the people that have worked for Reclamation twenty, twenty-five years and anticipate of because their work and what they have done, they have a right to be in some of those positions, and the fact is, the way things are going now, that's probably not going to happen. So I understand what's behind it, but how you do that becomes fairly subjective and, in some cases, highly questionable.

So I don't know. I guess that's another area where we have changed an awful lot, you know. People, whether we understand it or not, people like decisions and they like leadership. And when things are just kind of floundering and drifting and nobody really knows where we're going, you lose an awful lot in terms of the *esprit de corps* in the organization. It just doesn't exist. I think we started losing that probably in the late eighties and its continued up until the present time. Even Dan Beard. You may not have liked where Dan was going, but, by God, he knew where he was going, and he made it clear to the staff, whether they liked it or not, that we had a direction. So it was acceptable. And aside from that, we've kind of drifted a bit.

Storey: Another thing, looking back over your career, as you moved–

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Storey: ... and advanced, how did your perspectives change? What kind of perspective changes have to take place in order to permit that kind of advancement?

Schroeder: Oh, let me see. Thinking back, I guess being somewhat conservative, I've always been concerned with the dollars, how they're spent, what they're spent for, and always been fairly nitpickey about compliance with laws and regulations and policies. In the old days, for example, the old–oh, God, what was the name of it? Well, I'll think of it. But, anyhow, it was money set aside for protection of federal facilities, and the use of that money in large part was kind of a slush fund for providing work during the winter for irrigation districts to build things, at least up in the Great Plains Region, the old Upper Missouri Region. They took the largest chunk of that fund and used it for building riprap on the Yellowstone River and different things, and building facilities that, in my view, could have been dealt with in a different way, and that money probably shouldn't have been used for that.

Over the years, I guess I've come to understand more about how the process works and probably become a lot more liberal in dealing with how the money is

passed through and distributed and understanding how projects get built. There has to be sometimes pretty liberal interpretation of the law to get what is necessary done. And you may disagree with it but, in fact, a lot of good things are done even though they're in the gray area, right on the fringes of being either legal or illegal.

As I moved up through the organization, I developed a lot more respect for the Bureau. When I was down in the rank and file, it didn't bother me to leave Reclamation and go to work on the pipeline projects, not knowing whether or not I'd come back to Reclamation, and really not caring. But here in the last part of my career–I've been now with Reclamation since I came back in '83, so its been fourteen years–and working in Billings, Montana, then coming to Denver, then going to Phoenix, I have developed a high regard for Reclamation as a government agency. I think its, if not the best, one of the best that exists, even with all our problems, and have developed a sense of pride. It pains me sometimes to see the organization drifting as much as it does and has. So from that standpoint, I think its changed quite a bit.

Darrell Webber was a big influence on that. His dedication to the Engineering and Research Organization and the capabilities that were required to go into the next century, I think Darrell took that very seriously, and it probably got him in trouble in terms of his departure, because he knew where he thought things ought to be going. When Dan Beard came in, of course, that was a totally different direction, and that frustrated Darrell terribly. So I've kind of picked up the banner from Darrell's influence on that, and I have the same concern, I guess, that the organization needs to pay a lot more attention to its internal capability and internal direction. So I guess that's about it.

Storey: What do you plan to do in retirement? Anything professional?

Schroeder: Well, I don't think so. I don't know what I have to offer professionally, really. I'm not a technically competent engineer anymore. Without going back into the textbooks, I couldn't design a walkway over a creek, I don't think. That's probably stretching it. I think I could handle that one. But I'm not into the nitty-gritty of the technical side anymore.

I've been reasonably successful, I think, in terms of dealing with people and listening to people provide advice and counsel on making decisions, and then making the decisions based on that and going in the right direction. I'm not an astute politician. I don't understand it and disagree with it, in large measure, a lot of times on how decisions are made, particularly the political arena. In terms of this

administration, you have to be so damn cautious that you check the wind in every direction the wind is blowing from before you do anything.

So I'll probably loaf for a couple of years. I plan to golf and fish, and if a job opportunity comes along at some point in the future, I may consider it, but I'm not concerned about it. I might be happy being a marshal on a golf course. Who knows?

Storey: A marshal?

Schroeder: That's a guy that rides around in a cart and tells people to hurry up, they're going too slow.

Storey: Oh, really? The only times I've played golf, there weren't those kinds of issues. (laughter)

Schroeder: Well, most of them don't do their job. That's why you go so slow on a golf course. They're usually out hunting for golf balls. And it doesn't pay very good, so you can't expect a high level.

Storey: Anything else we ought to talk about or that you want to talk about?

Schroeder: I don't think so. We've pretty much covered my career with Reclamation. I've kind of requested–I didn't kind of, I requested that I go out with just kind of fade away. I don't want big parties and major recognition for anything. I don't think I deserve it. I'm not any major guru in water issues or anything. I've just been kind of a team player on the way through, and my passing won't even leave a ripple in the dust of Reclamation's history. But its been a good career and its been fun, for the most part, and I just want to pass off. Made a lot of good friends, and I'll shake their hand and say goodbye.

I do expect to periodically drop back and visit people and stay in contact. A lot of retirees go out the door and you never see them again, which is a little bit disappointing. I hope I don't do that. But its been a good career. I've enjoyed it, and now I'm going to enjoy retirement.

Storey: One thing I guess I didn't ask you. Eluid Martinez, what's your impression of him as commissioner?

Commissioner Eluid Martinez

Schroeder: Personally I like Eluid, and I think he has the best intentions for Reclamation. I think he's trying to steer us in a direction that gets us back on track in terms of recognizing our past, certainly not forgetting our past, and getting us more in tune with the fact that we are the Bureau of Reclamation, we are here to deal with water and water issues. We're not Fish and Wildlife Service. We're not the Environmental Protection Agency. We're not B-I-A. We're the Bureau of Reclamation. We've got a large infrastructure. We need to deal with it. And Eluid, at the last Area Managers Conference in Washington, made that point again. He said this idea that we abandoned our past and now we're a new Bureau of Reclamation is a bunch of balderdash. We're not a new Bureau of Reclamation, we're *the* Bureau of Reclamation. I think that's good. I think Eluid's brought some semblance of direction back to the organization. Take pride in what we've done and be proud of what we're going to do, but recognize that we are who we are and that's the direction we've got to keep going. So I respect Eluid for that.

I think Eluid has been hamstrung by the administration somewhat. This administration doesn't want to make waves. They don't want any bad publicity and, by God, you talk about putting the authority and the decision-making out where the rubber meets the road, again, perception is greater than reality. In fact, almost everything we do that is controversial is controlled and directed out of the department, and if you screw up, you're going to hear about it.

Even some of the things I've done over the past year in terms of trying to defend us from C-A-W-C-D and having statements in the newspaper, an article here recently, I think was published June 12th, and the rumbling came back that the assistant to Patty Beneke was extremely displeased that I had made some of the statements I made in that article in defense of Reclamation and taking the district to task. It was dealt with back there. But that's the kind of situation that Eluid has had to operate under. You know, when you're so constrained, you can't be afraid to stick your neck out sometimes. You've got to get out there and kick some butt periodically. And if you can't do that and be controversial sometimes, its not only not much fun, your effectiveness is not very good. You lose a lot in the interpretation, I think.

But I like Eluid. I think he's been good. He's not been a [Floyd] Dominy. I mean, those years are gone. He's not been a strong new direction leader of the organization, but I think he stabilized the direction that we're going and brought more stability to us in the aftermath of Dan Beard, when things were kind of left in

a state of total anarchy and disarray. So that's my assessment of Eluid.[16]

Storey: Anything else?

Schroeder: Nope.

Storey: Okay. Well, let me ask you if you're willing for the information on these tapes and the resulting transcripts to be used by researchers.

Schroeder: That's fine with me.

Storey: Good. Thank you very much.

END SIDE 2, TAPE 2. JUNE 20, 1997.
END OF INTERVIEWS.

16. For more information on Eluid Martinez, see Eluid L. Martinez, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews, conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, during 1996-2001, in Washington, D.C., www.usbr.gov/history/oralhist.html.